



## AGENDA

Gainesville Planning and Appeals Board  
Tuesday, May 9, 2017, 5:30 PM  
Gainesville Justice Center

### 1. CALL TO ORDER

### 2. MINUTES

#### A. April 11, 2017 PAB Meeting Minutes

### 3. OLD BUSINESS

#### A. Annexation Requests

- (1) Request from **Oak Hall Companies, LLC** to annex a 26.16± acres tract located east of Dawsonville Highway and on the north side of the intersection of Strickland Drive and Sportsman Club Road, with road frontage on Karen Lane (a/k/a **0 and 2209 Karen Lane; 2106, 2234 and 2242 Sportsman Club Road; and 2049 Strickland Drive**) and to establish zoning as Planned Unit Development (P-U-D).

Ward Number: One

Tax Parcel Number(s): 00-109-003-001, 004, 005; 00-109B-000-001, 002A and 036

Request: Active adult community

- (2) Request from **Oak Hall Companies, LLC** to annex a 50.81± acres tract located on the east side of Dawsonville Highway (S.R. 53), having road frontage on Dawsonville Highway, Ahaluna Drive, Skyview Drive and Strickland Drive (a/k/a **0 and 1758 Ahaluna Drive; 1508, 1550, 1740, 1746, 1758, 1760, 1934 and 1982 Dawsonville Highway; 300 and 301 Skyview Drive; 0, 2008 and 2016 Strickland Drive**) and to establish zoning as Planned Unit Development (P-U-D) and General Business (G-B).

Ward Number: One

Tax Parcel Number(s): 00-110-000-005 (part), 028, 032 (part) and 039;  
00-110A-004-001 (part), 002A, 004 (part), 005 (part), 007 (part), 007A (part),  
007X,

014 (part), 016 (part), 017 (part) and 018

Request: Mixed-use development

#### B. Rezoning Request

- (1) Request from **Oak Hall Companies, LLC** to rezone a 157.98± acres tract located on the east side of Dawsonville Highway (S.R. 53), having road frontage on Ahaluna Drive, Skyview Drive, Strickland Drive, Lakeshore Circle, West Lake Drive and Karen Lane (a/k/a **0, 1264 and 1817 Ahaluna Drive; 1876 Dawsonville Highway; 2208 Karen Lane; 0 and 2029 Strickland Drive; 0 and 1489 West Lake Drive**) from Residential-I-A (R-I-A), Residential-I (R-I), Planned Unit Development (P-U-D) and Regional Business (R-B) to Planned Unit Development (P-U-D) and General Business (G-B).

Ward Number: One

Tax Parcel Number(s): 00-109B-000-003A; 00-110-000-001, 006, 030, 031, 034, 035, 036, 037 and 038;  
01-110-001-006; 01-110A-004-022; 01-114-001-001, 026, 145 and 161

Request: Mixed-use development

### 4. NEW BUSINESS

#### A. Zoning Amendment Request

- (1) Request from **Brightstone Transitions** to amend the existing Planned Unit Development (P-U-D) zoning on a 0.50± acre tract located at the east side of Green Street, across from its intersection with Forrest Avenue (a/k/a **446 Green Street, NE**).

Ward Number: Four

Tax Parcel Number(s): 01-024-001-005

Request: Group home and office

**B. Rezoning Request**

- (1) Request from **Montecito Development** to rezone a 0.48± acre tract located on the south side of Enota Avenue, west of its intersection with Thompson Bridge Road (a/k/a **149 Enota Avenue, NW**) from Office and Institutional (O-I) to Neighborhood Business (N-B), with a special use.

Ward Number: Two

Tax Parcel Number(s): 01-074-004-001

Request: Convenience store with fuel pumps

**C. Special Use Requests**

- (1) Request from **Montecito Development** for a special use on a 0.80± acre tract located at the southwest side of the intersection of Enota Avenue and Thompson Bridge Road (a/k/a **1281 Thompson Bridge Road, NW**), having a zoning of Neighborhood Business (N-B).

Ward Number: Two

Tax Parcel Number(s): 01-074-004-020

Request: Convenience store with fuel pumps

- (2) Request from **Gainesville Market, LLC** for a special use on a 5.0± acres tract located west of Shallowford Road within the Gainesville Market Shopping Center (a/k/a **600 Shallowford Road**), having a zoning of General Business (G-B).

Ward Number: Five

Tax Parcel Number(s): 01-119C-001-029

Request: Commercial outdoor recreational facility

- (3) Request from **Manor Lake Development, LLC** for a special use on a 9.24± acres tract located on the northwest side of McEver Road, between Browns Bridge Road and Orchard Brook Drive (a/k/a **2900 McEver Road**), having a zoning of Office and Institutional (O-I) and Residential-I (R-I).

Ward Number: Four

Tax Parcel Number(s): 08-022-000-005

Request: Assisted living facility

- (4) Request from **Carriage North, LLC** for a special use on a 0.71± acre tract located on the southwest side of the terminus of Corporate Drive, west of Browns Bridge Road (a/k/a **2425 Corporate Drive**), having a zoning of General Business (G-B).

Ward Number: Five

Tax Parcel Number(s): 08-007-001-042

Request: Helipad

**5. MISCELLANEOUS**

**6. ADJOURNMENT**



# CITY OF GAINESVILLE

## AGENDA REQUEST

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**Date Submitted:** 4/25/2017  
**Presenter:** N/A  
**Item of Business:** April 11, 2017 PAB Meeting Minutes  
**Meeting Date:** 5/9/2017

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**Purpose of Request:**

The purpose of this request is to allow the Planning and Appeals Board to approve the minutes from the referenced meeting.

**History/Background:**

**Facts & Issues for Consideration:**

The draft minutes were reviewed by the Planning Manager and Community Development Director.

**Department Recommendation:**

Approval of the minutes as presented.

**Department Director:**

Rusty Ligon

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**If funding is involved, are funds approved within the current budget?**

N/A

**Amount Requested:**

**Source of Funds:**

**Finance Comments:**

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**Administrative Comments:**

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**ATTACHMENTS:**

|                                                                                     | Description   | Type    |
|-------------------------------------------------------------------------------------|---------------|---------|
|  | Draft Minutes | Minutes |

**GAINESVILLE PLANNING AND APPEALS BOARD**  
**DRAFT MINUTES OF MEETING**  
**APRIL 11, 2017**

**CALL TO ORDER** Chairman Carter at 5:30 p.m.

**Members Present:** Chairman Doug Carter, Vice-Chair Jane Fleming, Board Members Connie Rucker, Eddie Martin, Sr., Ryan Thompson and Rich White

**Members Absent:** Board Member Carmen Delgado

**Staff Present:** Community Development Director Rusty Ligon, Planning Manager Matt Tate and Recording Secretary Judy Foster

**Others Present:** Council Member George Wangemann

**MINUTES OF MARCH 14, 2017**

**There was a motion to approve the minutes as presented.**

Motion made by Board Member Martin  
Motion seconded by Board Member Rucker  
**Vote – 6 favor, 1 absent (Delgado)**

**NEW BUSINESS**

**A. Variance Request**

- 1) Request from **Antioch Baptist Church** to vary the lighting requirements for a sign on a 0.925± acre tract located on the southwest side of the intersection of Mill Street and Elm Street (a/k/a **1010 Mill Street SE**), having a zoning classification of Neighborhood Conservation (N-C).

Ward Number: Three

Tax Parcel Number(s): 01-034-002-001

Request: Electronic message board sign

**Staff Presentation:** Planning Manager Matt Tate gave the following staff presentation:

The applicant is proposing to vary the lighting standards to allow for an electronic message board (EMB) sign to be added to the existing monument sign along Mill Street. The property is zoned Neighborhood Conservation (N-C) which only allows signs with external illumination. The subject property is 0.925± acre in size and is located on the southwest side of the intersection of Mill Street and Elm Street and is the location of the Antioch Baptist Church. The adjacent and nearby uses include single-family homes, Gainesville Bethel A.M.E. Church which fronts Mill Street and McDonald Street, the Boys and Girls Club and Fair Street Elementary School located to the north, and various industrial uses located south of the property near the railroad. According to the applicant, the proposed sign will use the existing sign posts and frame but will replace the existing manual message board with a 14 square foot (2.5' x 11.6') electronic message board sign. Where EMB signs are permitted, the maximum size allowed by the code is 20 square feet with amber or white lighting.

The applicant states the proposed request would benefit the church and community as a whole which would allow for flexibility to display messages that will better represent the church. As well, the sign's color, brightness and time of operation will be maintained to help minimize any potential disruption to the neighbors. There have been no nearby variance requests approved for EMB signs within the immediate area. However, numerous variance requests for similar EMB signs have been approved within the city limits over the past 10 years for various churches including the First Baptist Church on Green Street, First United Methodist Church on Thompson Bridge Road and the New Haven Church on White Sulphur Road. The supporting documents provided by the applicant include a Statement of Hardship, Concept Plan, Sign Rendering, and a Petition of Support.

The Planning Division staff is recommending conditional approval of this variance request given the limited visibility of the sign due to existing vegetation with one condition.

**Applicant Presentation:** Steve Calloway, 253 Glen View, Hoschton, stated he was a member of Antioch Baptist Church and noted Pastor Rodney Lackey and other church members were also in attendance. He stated the purpose for the sign is community outreach, including messages about church activities as well as community events and information. He stated the hardship for the sign is due to the existing trees and shrubbery and the lighting for the sign would make it more visible. Mr. Calloway stated they spent considerable time checking with their neighbors to make sure it would not be a problem for them and even held a community meeting at the church to present the proposed sign and to answer any questions or concerns from the community. They also went door to door in the community and obtained 67 signatures in support of the sign. A woman directly across the street from the church told him she would appreciate the extra light from the sign for security purposes. They are able to control the brightness of the sign and use the timer if there are any problems with the neighbors. He felt the sign would benefit the church and the community.

**FAVOR:** None

**OPPOSE:** None

**Planning and Appeals Board Comments:** Board Member Martin asked what time the sign would be cut off. Mr. Calloway stated at 10:00 pm during daylight savings time.

**There was a motion to recommend approval of the variance as presented with the following condition:**

**Condition**

**The subject property shall be limited to one electronic message board sign. The electronic message board sign may be two sided not to exceed 20 square feet per side and shall meet the standards of the Unified Land Development Code.**

Motion made by Board Member White  
Motion seconded by Board Member Martin  
**Vote – 6 favor, 1 absent (Delgado)**

***NOTE: Vice-Chair Fleming recused herself from the meeting at 5:42 p.m.***

## **B. Rezoning Request**

- 1) Request from **W. L. Norton Agency, Inc.** to rezone a 0.42± acre tract located on the east side of Boulevard, north of its intersection with Park Street (a/k/a **418 Boulevard NE**) from Residential-II (R-II) to Residential and Office (R-O).

Ward Number: Two

Tax Parcel Number(s): 01-038-003-012

Request: Professional office

**Staff Presentation:** Planning Manager Matt Tate gave the following staff presentation:

The applicant is proposing to rezone the subject property from Residential-II (R-II) to Residential and Office (R-O) for an insurance and real estate office. The property contains a two-story, 3,738± square foot, residential duplex structure, detached two-story garage and a small detached screened in sandbox. The adjacent uses include professional offices zoned R-O to the north and west, single-family homes to the south, east and west zoned R-II. In 2012, a similar request by the applicant to rezone the adjacent 424 Boulevard property from Residential-II (R-II) to Residential and Office (R-O) was approved with conditions for a professional office. The applicant states that renovations to the site are to include converting 2,205 square feet of the first floor to office space and the addition of 11 to 13 new gravel parking spaces to the rear of the structure consisting of pea gravel and existing concrete. The applicant states that the two residential apartments on the upper floor will eventually be renovated for additional office space. There are expected to be 4 primary employees with business hours from 8:30 A.M. to 5:00 P.M. Monday thru Friday. Guests will be directed to the main office building across the street.

The Future Development Map for the City of Gainesville places the subject property within the *Low-Medium Residential* land use category which includes areas containing or planned for single-family detached or semi-detached housing at densities ranging from two to four dwelling units per acre with only limited light office use allowed, such as a home office. As well, the property is located within the *Traditional Neighborhoods* Character Area specifically within the *Northern Neighborhoods subarea*. The vision for this area anticipates minimal change, and primary issues within this subarea include incompatible infill development and the threat of encroaching urban sprawl. Commercial encroachment should be minimized and should respect and mirror the small scale of the surrounding neighborhoods, while the purity of the landscape and quality of housing should be preserved. The area is not a primary destination for business; however neighborhood serving business development is encouraged. Land uses allowed include low-density and medium-density residential, and mixed-use / commercial.

The Planning Division staff is recommending conditional approval of this rezoning request with R-O zoning, based on the Comprehensive Plan and the surrounding residential and non-residential land uses with the following six conditions:

1. Any new or replacement structure(s), exterior facade change(s), and/or future development at this location shall be of a single-family residential appearance and be characteristic of the surrounding historic properties, and shall be subject to the Community Development Director approval.
2. Any fire escape addition shall be located to the rear of the existing structure.

3. Any proposed new parking areas or potential storm water management areas shall be located to the rear of the structure and shall be adequately screened from the adjacent residential uses located along the south and east property lines. The buffer area shall consist of an opaque fence, a minimum of 6 feet in height, and evergreen shrubs or trees. The final installation, placement, maintenance and type of the buffer shall be subject to the Community Development Director approval.
4. The subject property shall be limited to no more than 13 total parking spaces including handicapped parking. This shall not include parking within the proposed detached garage. The use of pervious material within the parking area shall require approval by the Department of Water Resources.
5. The subject property shall be limited to one (1) monument sign for a future office use not to exceed five (5) feet in height and twenty (20) square feet in size.
6. An updated as-built boundary survey/plat of the subject property, indicating existing conditions and all improvements, shall be recorded prior to obtaining a Certificate of Occupancy for the future professional office use.

**Applicant Presentation:** Frank Norton, Jr., 434 Green Street, stated he would like to reserve time for rebuttal and clarification. He stated he and his brother owns The Norton Agency, an 89 year old insurance and real estate company. The purpose of the rezoning request is to add a building to their corporate campus. He felt his family DNA is rooted in preservation and quality development and shared some history of the Green Street area and his family's involvement in its development. Mr. Norton stated the house on the subject property was the original Candler Street School which was moved to this site from Candler Street in 1905, renovated at that time for a duplex and has remained a duplex for its existence. He appreciates the street character of the house and the front gardens as created by Mrs. Powell which will be largely unchanged. The facility will house the corporate CFO, VP of Human Resources and is a base for their regional commercial brokerage as they come and go throughout the month. No lobby or receptionist will exist within the facility, thus limiting public interaction. The facility will be well landscaped and well designed with attention to detail. Mr. Norton concluded that he was in agreement with the conditions as proposed by staff and asked for approval of the request.

**FAVOR:** None

**OPPOSE:** Thomas Mitchell, 1809 Buford Highway, Buford, stated he represented the Crumleys on Park Street whose property is adjacent to the rear of the subject property. He stated the Crumley home is one of the older homes in the area which they bought and spent a substantial amount of money renovating it. He stated that the Comp Plan indicates the area should be a historic residential area and his clients want their property interests protected by leaving it residential. Mr. Mitchell provided copies of sections from the Comp Plan to the Board to highlight the following: Park Street is specifically called out as an identifier of the Park/Prior/Perry neighborhood which would be strengthened and preserved as a traditional or historic residential district, and the line between the campus and the neighborhood held just south of Park Street; Under *Community Objectives*, within the *Traditional Neighborhoods* and *Heritage Preservation* categories, the area is a classic intown historic neighborhood but is threatened by insensitive development and also includes historic resources which are worth protecting, noting the applicant wants to construct a parking lot right beside his clients property which he felt was not consistent with the objectives; Even though it is not specific to the subject property, under *Land Use Goals* the implementation measures listed are intended to downzone an area instead of upzone in an

attempt at preserving the historic character of the area as well as encourage compatibility of non-residential uses to existing residential uses; Under *Housing Issues*, the Comp Plan supports continued efforts to preserve historic and intown neighborhoods and ensure compatible infill development; and Under *Land Use & Zoning Issues*, the Comp Plan states that infill development should be carefully guided, especially in historic neighborhoods, such as the area of the request, in order to preserve the historic integrity and character of the City. Mr. Mitchell felt the City's desire is to protect other property owners through its zoning regulations and the comprehensive planning process. With the number of statements highlighted in the Comp Plan, he felt it might suggest the rezoning itself is not proper at this location. Mr. Mitchell recalled a Georgia Supreme Court case from over 20 years ago which dealt specifically with landscaping and buffering around parking lots, noting the case was Parking Association of Georgia vs. City of Atlanta. The decision gave the City permission to limit the use of that property, especially when trying to protect the historic integrity of the area, even though it would diminish the usability of the property.

Mr. Mitchell stated the Crumleys would prefer the request be denied and the Residential-II zoning stay in place so the office uses do not continue to encroach into the residential area. However, if the Board recommended approval, he presented additional conditions to the Board which his clients would like to have included with staff's conditions. Mr. Mitchell stated Mr. Norton actually provided these conditions to his clients and he requested the following changes noted in red:

- 1) Norton will build an 8-foot **pressure treated** wooden fence from the corner of existing garage to **a point 5-feet off the property line at** existing side fence on south side of property. **Norton shall regularly maintain structure, integrity and appearance of the fence.**
- 2) At the existing tree, the fence will split and brackets installed to preserve tree and allow for tree growth.
- 3) The Crumley's may plant and maintain any plant material they want on Norton's property but on the Crumley's side of Norton's fence.
- 4) Concrete bumper guards will be installed along Norton's fence area for protection of wooden fence from cars.
- 5) Low level exterior lights will be placed in parking area for security. **The lighting shall be designed so as to minimize light spillage along the exterior of the development to not more than one .25 foot candle.**
- 6) Norton will use their main campus dumpster for trash disposal versus having onsite commercial dumpster.
- 7) **A planted buffer shall be installed on the Norton side of the fence. This buffer shall be 7-feet at the south fence. Plantings shall be subject to approval of the Community Development Director. This buffer shall be installed and maintained in the manner required by the Unified Land Development Code and shall include a mix of trees and shrubs and shall be at least as high as the fence.**

In conclusion, Mr. Mitchell stated that just because the Norton family has done a lot for the City of Gainesville does not mean they should get to do anything they want, wherever they want. As a formality, he provided a constitutional objection to the rezoning request and stated he was available to answer any questions.

**REBUTTAL:** Frank Norton, Jr. stated he would argue the proposed development is sensitive in nature as opposed to insensitive as described by Mr. Mitchell. Mr. Norton presented photographs of their Frierson renovation as an example of preserving historic resources, and of the subject property in which they intend to leave the streetscape intact.

In regards to compatibility of non-residential uses to existing residential uses, Mr. Norton stated they are not changing the footprint of the house, noting the fire escape would be the only exterior addition and will be located in the same place as the existing deck. They also will not be changing the residential scale. Mr. Norton stated the Crumleys purchased their house after the Frierson rezoning to Residential and Office and with no fence separating the structures, noting they cleaned up their property which opened up their view even further. He stated the Crumleys purchased their house which overlooks a 21-car parking area, knowing they had a small lot and was already adjacent to R-O zoning. Mr. Norton presented additional photos of the view from the Crumleys house. He stated Planning staff recommended approval of the R-O zoning which has been used to maintain the historic character of these structures. Planning staff recommended a 6-foot fence and Mr. Norton recommended an 8-foot fence. He stated the adjacent neighbor on Boulevard, Scotty Ball, submitted a letter of support for the rezoning. He met with Mr. Crumley early on to walk the property line and even made an offer to purchase their house. Even though Mr. Crumley rejected the recommendations for conditions by Mr. Norton two weeks ago, he stated he had no problem with the fence being pressure treated or that he would maintain the fence as noted in the revised conditions presented by Mr. Mitchell. However, he did have a problem with #1 "a point 5-feet off the property line" because it imposes upon the pre-existing 2-story garage which was built by the Powell's and would then block any entry into one of the garage bays. He was agreeable with the other conditions except #7 which would require them to remove the existing paving, would block access to the garage and would eliminate the ability to put in an entire row of parking which would eliminate 7 parking spaces. He argued the proposed plan is less dense than the one next door and will be a quality development, noting they have put in measures to protect their next door neighbors.

Chairman Carter asked Mr. Mitchell if he wanted to make any final comments.

In regard to the pre-existing parking lot to the north of the Crumley's home, Mr. Mitchell stated the parking lot sits a substantial distance from their home and is not nearly as impactful as the proposed parking lot. He reiterated his clients would like the request to be denied, however, if the Board recommended approval, they would like the additional conditions placed on the property in order to help screen the house.

**Planning and Appeals Board Comments:** None

**There was a motion to recommend approval of the rezoning as presented with the following conditions:**

**Conditions**

- 1. Any new or replacement structure(s), exterior facade change(s), and/or future development at this location shall be of a single-family residential appearance and be characteristic of the surrounding historic properties, and shall be subject to the Community Development Director approval.**
- 2. Any fire escape addition shall be located to the rear of the existing structure.**
- 3. Any proposed new parking areas or potential storm water management areas shall be located to the rear of the structure and shall be adequately screened from the adjacent residential uses located along the south and east property lines. The buffer area shall consist of an opaque fence, a minimum of 6 feet in height, and evergreen shrubs or trees. The final installation, placement, maintenance and type of the buffer shall be subject to the Community Development Director approval.**

4. The subject property shall be limited to no more than 13 total parking spaces including handicapped parking. This shall not include parking within the proposed detached garage. The use of pervious material within the parking area shall require approval by the Department of Water Resources.
5. The subject property shall be limited to one (1) monument sign for a future office use not to exceed five (5) feet in height and twenty (20) square feet in size.
6. An updated as-built boundary survey/plat of the subject property, indicating existing conditions and all improvements, shall be recorded prior to obtaining a Certificate of Occupancy for the future professional office use.
7. The applicant will construct an 8-foot pressure treated wooden fence from the corner of the existing garage to the existing side-fence on the south side of the property and shall regularly maintain the structure, integrity and appearance of the fence.
8. At the existing tree, the fence shall split and brackets shall be installed to preserve the tree and allow for tree growth.
9. The adjoining property owners may plant and maintain any plant material they desire on the subject property on the adjoining property owners side of the fence.
10. Concrete bumper guards will be installed along fence area for protection of wooden fence from vehicles.
11. Low level exterior lights will be placed in parking area for security. The lighting shall be designed so as to minimize light spillage along the exterior of the development to not more than one .25 foot candle.
12. The applicant shall use their main campus dumpster for trash disposal rather than having an onsite commercial dumpster.

Motion made by Board Member Martin

Motion seconded by Board Member White

**Vote – 5 favor, 1 recusal (Fleming), 1 absent (Delgado)**

***NOTE: Vice-Chair Fleming returned to the meeting at 6:15 p.m.***

### **C. Special Use Request**

- 1) Request from **Adams & Copeland, LLC** for a special use on a 0.61± acre tract located on the west side of Thompson Bridge Road, north of its intersection with Virginia Circle (a/k/a **1665 Thompson Bridge Road NW**), having a zoning classification of Office and Institutional (O-I).  
Ward Number: One  
Tax Parcel Number(s): 01-091-003-015  
Request: Hair salon and office

**Staff Presentation:** Planning Manager Matt Tate gave the following staff presentation:

The applicant is proposing a special use within Office and Institutional (O-I) zoning for the purpose of renovating an existing residential home for a hair salon and office. The existing hair salon known as Hair Artistry, has been located within the Sherwood Plaza Shopping Center for over 20 years. The subject property was previously rezoned in October of 2016



for an insurance office but has remained vacant. The property is located within the Gateway Corridor Overlay Zone and the adjacent uses include an attorney's office, optometrist office and single-family homes. The property contains a 2,500 square foot vacant residential structure and a detached outbuilding. The applicant proposes to remove the existing two car garage and outbuilding in order to provide access to construct a parking area within the rear yard to include 18 to 20 parking spaces consisting of permeable pavers. By doing so, the structure will be reduced in size to approximately 1,860 square feet in size.

According to the Georgia Department of Transportation (GDOT), the development will be required to meet the sight distance requirements and will need to coordinate with GDOT for review and approval.

The Future Development Map for the City of Gainesville places the subject property within the *Mixed Use General* land use category which includes areas containing or planned for a mixture of land uses including office, neighborhood retail, and residential. As well, the subject property is located within the *Traditional Neighborhoods* Character Area specifically within the *Northern Neighborhoods subarea*. The vision for this area anticipates minimal change, and primary issues within this subarea include incompatible infill development and the threat of encroaching urban sprawl. Commercial encroachment should be minimized and should respect and mirror the small scale of the surrounding neighborhoods, while the purity of the landscape and quality of housing should be preserved. The area is not a primary destination for business; however neighborhood serving business development is encouraged. Land uses allowed include low-density and medium-density residential, and mixed-use / commercial.

The Planning Division staff is recommending conditional approval of this special use request based on the Comprehensive Plan and the adjacent non-residential uses with four conditions.

**Applicant Presentation: Peggy Copeland**, 6544 Stringer Road, Clermont, stated she and her sister are co-owners of Hair Artistry which is a family business, noting they have a third generation coming up and would like to provide a nice place for them to work and serve the community in a good way. She stated their parents owned the first shop, but they have always rented and with the uncertainty of their current location, they don't want to be in that situation again. They will keep the character of house and have parking in the rear. She stated the proposal would be very low impact as far as the neighborhood is concerned.

**QUESTIONS: Brenda Coursey**, 493 Mountain View Drive stated the subject property backs up to residential and she was concerned about runoff crossing over Thompson Bridge Road and coming on down onto Mountain View Drive. She asked if the conditions require the use of pervious paving for the rear.

Chairman Carter stated the applicants are proposing pervious pavers which would help with drainage and asked Planning Manager Matt Tate for clarification. Mr. Tate stated you would not want to make pervious pavers a requirement because they are not allowed just anywhere. The Department of Water Resources would have to review and approve the area where it would be permitted, noting this would be a part of the design review process and they will work with the applicant on the matter.

**FAVOR:** None

**OPPOSE:** None

**Planning and Appeals Board Comments:** Vice-Chair Fleming stated she was glad to see the proposal is preserving the neighborhood.

**There was a motion to recommend approval of the special use as presented with the following conditions:**

**Conditions**

1. Any new or replacement structure(s), exterior facade change(s), and/or future development at this location shall be of a single-family residential appearance and be subject to Community Development Department approval. Said new or replacement structure(s), and / or future development, shall consist of a pitched roof with architectural shingles.
2. The existing, healthy significant trees located on the subject property shall be retained and incorporated into the design of site improvements where possible, including the proposed parking area, and shall be protected throughout construction of any required and/or proposed improvements.
3. All access point design along Thompson Bridge Road and sidewalk installation shall require approval by the Georgia Department of Transportation in conjunction with the Gainesville Public Works Director. All required access / traffic / sidewalk improvements associated with the proposed development shall be at the full expense of the developer / property owner.
4. An updated as-built boundary survey / plat of the subject property, indicating all improvements required for the proposed use, shall be recorded prior to obtaining a Certificate of Occupancy.

Motion made by Board Member Martin  
Motion seconded by Board Member Thompson  
**Vote – 6 favor, 1 absent (Delgado)**

**ADJOURNMENT**

**There was a motion to adjourn the meeting at 6:25 p.m.**

Motion made by Board Member Martin  
Motion seconded by Vice-Chair Fleming  
**Vote – 6 favor, 1 absent (Delgado)**

Respectfully submitted,

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Doug Carter, Chairman

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Judy Foster, Recording Secretary

# CITY OF GAINESVILLE

## AGENDA REQUEST

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**Date Submitted:** 4/25/2017

**Presenter:** Matt Tate

**Item of Business:** Request from **Oak Hall Companies, LLC** to annex a 26.16± acres tract located east of Dawsonville Highway and on the north side of the intersection of Strickland Drive and Sportsman Club Road, with road frontage on Karen Lane (a/k/a **0 and 2209 Karen Lane; 2106, 2234 and 2242 Sportsman Club Road; and 2049 Strickland Drive**) and to establish zoning as Planned Unit Development (P-U-D).  
Ward Number: One  
Tax Parcel Number(s): 00-109-003-001, 004, 005; 00-109B-000-001, 002A and 036  
Request: Active adult community

**Meeting Date:** 5/9/2017

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### **Purpose of Request:**

The applicant is proposing to annex the subject property with a zoning of Planned Unit Development (P-U-D). The property is currently zoned Planned Residential Development (P-R-D) within Hall County and is contiguous to the city limits to the east. Presently, the tract of land consists of six parcels which are heavily wooded and contain three single-family homes. The property was previously rezoned in 2006 and later amended in 2008 in Hall County for a similar proposal. The applicant is requesting sanitary sewer services and is required to annex as the property is now adjacent to the city limits. The proposed development consists of 90 active adult units to include a mixture of terrace homes / townhomes. The development will include a community clubhouse and pool. Access is proposed from Karen Lane and storm water detention is proposed underground. It is the intent for the proposal to complement the adjacent mixed-use development.

### **History/Background:**

On June 1, 2016, the applicant withdrew their annexation application for the same property.

All three **Oak Hall Companies, LLC** agenda items were tabled at the March 14, 2017 PAB meeting after staff reviewed the requests and determined that the applicant needed to provide additional traffic data prior to staff giving an official recommendation. Therefore, PAB tabled the items for a period of 60-days to be scheduled for the May 9, 2017 Planning and Appeals Board meeting.

### **Facts & Issues for Consideration:**

### **Department Recommendation:**

Planning staff is recommending approval with sixteen conditions.

### **Department Director:**

Rusty Ligon

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### **If funding is involved, are funds approved within the current budget?**

N/A

### **Amount Requested:**

### **Source of Funds:**

### **Finance Comments:**

### **Administrative Comments:**

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### **ATTACHMENTS:**

Description

Type

|   |                                      |                 |
|---|--------------------------------------|-----------------|
| ▢ | Staff Report                         | Report          |
| ▢ | Location Maps                        | Backup Material |
| ▢ | Narrative                            | Backup Material |
| ▢ | Survey                               | Backup Material |
| ▢ | Site Plan                            | Backup Material |
| ▢ | Elevations and Floor Plans           | Backup Material |
| ▢ | Traffic Impact Study                 | Backup Material |
| ▢ | Letter of Opposition                 | Backup Material |
| ▢ | Reservation of Constitutional Rights | Backup Material |

**GAINESVILLE PLANNING and APPEALS BOARD  
STAFF RECOMMENDATION**

**Applicant** ..... Oak Hall Companies, LLC  
**Property Owners** ..... Kibisons, LLLP  
**Location** ..... 0 and 2209 Karen Lane; 2106, 2234 and  
2242 Sportsman Club Road; 2049 Strickland  
Drive  
**Request** ..... Annex 26.16<sup>±</sup> acres with Planned Unit  
Development (P-U-D) zoning  
**Ward** ..... One  
**Proposed Use** ..... Active adult community  
**Planning Division Staff Recommendation** ..... **Approval, with conditions**  
**Date** ..... May 9, 2017

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▪ **Applicant's Proposal and Background Information**

The subject property was rezoned to Planned Residential Development (P-R-D) in Hall County during 2006 and was later amended with conditions in 2008 for a similar proposal which included a total of 95 age-restricted residential units containing a mixture of 40 terrace homes, 28 cottages, 27 condominiums and a clubhouse/pool. Presently, the tract of land consists of six parcels which are heavily wooded and contain three single-family homes. The property has road frontage on Sportsman Club Road, Strickland Drive and Karen Lane.

The applicant's current request proposes to annex the subject 26.16<sup>±</sup> acres tract of land with a zoning of Planned Unit Development (P-U-D). The property is contiguous to the city limits to the east. The applicant is requesting sanitary sewer services and is required to annex as the property is now adjacent to the city limits of Gainesville. The proposal is intended to compliment the adjacent 208.79<sup>±</sup> acres proposed mixed-use development and is proposed as an "age in place" community.

The proposal consists of 90 age-restricted, active adult units that will comply with applicable U. S. Department of Housing and Urban Development (HUD) rules for age-restricted communities. Specifically, the request proposes 90 residential attached terrace home / townhome units. The development will include a common green space/park areas, community clubhouse and pool. One access road is proposed from Karen Lane and storm water detention is proposed underground. Some of the proposed development standards are listed below. A full description is provided with the application.

Residential

- Proposed Density: 3.43 units/acre
- Average anticipated home price: \$300,000
- Proposed Minimum House Size: 1,100 square feet
- Maximum Building Height: 30-feet
- Building Materials: No vinyl or aluminum siding allowed. Exterior facade may include brick, stone, hard coat stucco, hardiboard or a combination thereof. Accent material such as copper roofing, cedar shake, hardiboard or a combination of such materials may

be used not to exceed 50% of the facade. Roofing materials may include cedar shake, architectural shingles or metal as appropriate to the architectural style of each home.

- Each unit will have a minimum of 18-feet from the back of the sidewalk or 20-feet from the back of the curb when there is no sidewalk.
- Setbacks: (excluding steps, roof overhangs, chimneys, bay windows and patios) Zero foot (0') – Front, side and interior rear; (10') separation between blocks of units.
- Buffer: 50-foot perimeter buffer against all adjacent properties and roads consisting of a 25-foot undisturbed perimeter buffer and a 25-foot planted buffer.
- Water and Sewer: Provided by the City of Gainesville. When all phases are complete water will be looped from Ahaluna Drive to Strickland Drive. Sewer will require several pump stations with gravity to Dawsonville Highway which has ample capacity.
- Streets: All interior streets and driveways are proposed to be publically owned and maintained. 50-foot right-of-way widths; 24-foot pavement widths; 4-foot wide sidewalks on at least one side of each residential road. It is intended that the side streets serving the terrace homes/townhomes will be private.
- Parking: Each unit will have a two car garage and parking pad (4 spaces total); An additional 56± guest parking spaces are planned.
- Garbage Pickup: Provided by the City of Gainesville.

#### ▪ **Adjacent Land Use and Zoning**

The subject property is positioned near the northwestern edge of the city limits between Dawsonville Highway (S.R. 53) and Lake Sidney Lanier. Single-family homes and undeveloped land are located on all sides of the subject property. Most of these homes are located within unincorporated Hall County and are zoned Agricultural Residential-III (AR-III), Residential-I (R-I) and Vacation Cottage (V-C) located off of Sportsman Club Road, Strickland Drive, Karen Lane, Boy Scout Camp Road, Mount Crest Place and Whippoorwill Lane. The adjacent land in the city limits is zoned Planned Unit Development (P-U-D) to the south of which is being considered for rezoning for a mixed-use development.

Commercial properties can be found primarily to the south located along Dawsonville Highway. Most notably the Martin Boat Dock Company is located adjacent and south of the property across Strickland Drive. Other uses include an auto repair shop, various retail stores, restaurants, convenience store/gas station, mini warehouses, boat sales, and multi-family apartments. These properties are zoned Highway Business (H-B) within Hall County and General Business (G-B), Regional Business (R-B), Residential-II (R-II) and Planned Unit Development (P-U-D) within Gainesville. Recent significant development includes the Northlake Square shopping center and several outparcel developments located to the south zoned General Business (G-B) within Gainesville.

#### ▪ **Traffic Impact Study Summary**

A Traffic Impact Study was completed for the proposed development on January 24, 2017 and later revised on April 7, 2017 by Marc R. Acampora, PE, LLC Traffic Engineering. Most of the traffic counts were collected on Thursday, November 17, 2016 from 7:00 A.M to 9:00 A.M. and from 4:30 P.M. to 6:30 P.M. The counts at the North Lake Square entrance were collected on Wednesday, March 22, 2017. The magnitude of the side street volumes was found to be very comparable with the counts performed for this current study, and generally slightly higher. However, the volumes on the major streets were consistently notably higher for this current study. Historic Georgia DOT 24-hour traffic counts were also collected in the vicinity from the year 2015. The annual daily traffic volume on SR 53 north of Sportsman Club Road was 25,600

vehicles per day. The entire project is expected to generate 189 new trips in the a.m. peak hour, 274 new trips in the p.m. peak hour, and 3,387 new trips during a 24-hour weekday. The study extended one mile from the limits of the proposed site and included the following nine intersections:

1. Sportsman Club Road at Strickland Drive
2. Dawsonville Highway at Sportsman Club Road
3. Dawsonville Highway at Avonlea Way
4. Dawsonville Highway at Canterbury Road
5. Dawsonville Highway at Ahaluna Drive
6. Dawsonville Highway at North Lake Square Shopping Center Entrance
7. Dawsonville Highway at Beechwood Boulevard
8. Dawsonville Highway at McEver Road
9. Dawsonville Highway at Green Hill Circle
10. Dawsonville Highway at Shallowford Road

A summary of the study revealed that future operations, upon the project being fully constructed and operational, at the below intersections would have extremely heavy traffic flows rated LOS F. LOS "F" is a condition of extremely heavy flow, with frequent stoppage and very slow speeds. Traffic is unstable and often comes to a complete halt. These intersections include:

1) A.M. and P.M. peak hour southbound approach at Dawsonville Highway at Sportsman Club Road; 2) A.M. and P.M. peak hour eastbound and westbound left turn at Dawsonville Highway and Avonlea Way; 3) A.M. and P.M. peak hour eastbound and westbound left turn at Dawsonville Highway and Canterbury Road; 4) A.M. and P.M. peak hour westbound approach at Dawsonville Highway and Ahaluna Drive; 5) A.M. and P.M. peak hour eastbound left turn at Dawsonville Highway and Beechwood Boulevard; 6) P.M. peak hour northbound Dawsonville Highway at McEver Road; 7) A.M. / P.M. peak hour eastbound approach at Dawsonville Highway and McEver Road; 8) P.M. peak hour westbound approach at Dawsonville Highway at Green Hill Circle; and 9) P.M. peak hour eastbound approach at Dawsonville Highway and Shallowford Road.

The summary of findings and recommendations of the study are as follows:

#### **Sportsman Club Road at Strickland Drive**

No changes are recommended at this intersection for the existing, no-build, or Future Phase One and Future Phase Two conditions.

#### **Dawsonville Highway at Sportsman Club Road**

The side street delays at this intersection are significant now and will increase in the future. 1) While a warrant analysis was not performed as part of this traffic impact study, the low side street volumes make the intersection an unlikely candidate for signalization. The potential for justifying signalization will increase in the future, but side street volumes will continue to remain moderate. 2) This study also identifies the need for a northbound exclusive right turn lane to be added on GA 53 at Sportsman Club Road. Northbound and southbound exclusive left turn lanes are currently provided at this median break.

#### **Dawsonville Highway at Avonlea Way**

Side street delays are high at the existing eastbound approach of Avonlea Way, and these delays will increase in the no-build and future conditions. The side street volumes are predominately right turners, with extremely low left turn volumes. 1) The Lanier Tract will introduce a new fourth leg at the Avonlea Way intersection (there is an existing private residential driveway at this median break, which would be replaced by the Lanier Tract access).

Northbound and southbound exclusive left turn lanes are currently provided at this median break. The volumes exiting the new Lanier Tract access will be low and many of them will be right turners. Therefore, this intersection is considered unlikely to be a candidate for signalization in the existing, no-build, and Future Phases One and Two, even with the addition of the Lanier Tract trips. 2) The Georgia DOT right turn lane analysis suggests that a northbound exclusive right turn lane should be considered at this access and the site plan includes the addition of this lane. 3) The new site access should be constructed with one entering lane and one exiting lane. 4) The side street approach exiting the site should be controlled by side street stop sign and accompanying stop bar.

#### **Dawsonville Highway at Canterbury Road**

Side street delays are high on the existing eastbound approach of Canterbury Road and these delays will increase in the no-build and future conditions. As with Avonlea Way, the side street volumes at this intersection are predominately right turners, with extremely low left turn volumes. For this reason, this intersection is considered an unlikely candidate for signalization in the existing, no-build, and Future Phase One conditions. The outparcel access will align with Canterbury Road and the Lanier Tract will connect through the outparcels to GA 53 at this location. Northbound and southbound exclusive left turn lanes are currently provided at this median break. A short southbound deceleration lane is provided on GA 53 at Canterbury Road, though this lane does not appear to have been constructed to current Georgia DOT design standards. The northbound right turn volume will be low in the Future Phase One condition, and the Georgia DOT right turn lane analysis indicates that no decel lane will be required for Future Phase One. 1) However, with the future development of the retail outparcels, by others, the right turn volumes will be significant, primarily due to the outparcels, and a northbound deceleration lane is recommended for this location. The Future Phase Two side street volumes exiting the outparcels will be notable and this intersection will likely be a prime candidate for signalization upon development of the outparcels. 2) It is recommended that at such time as the outparcels are planned to be developed, a signal warrant study be performed for this intersection according to the standards set forth in the Federal Highway Administration's *Manual On Uniform Traffic Control Devices* (MUTCD). 3) This new access at the Canterbury Road median break should be constructed with at least one entering lane and an exiting shared left/through lane and an exclusive right turn lane. The two westbound lanes are in anticipation of the development of the outparcels. With only the Lanier Tract volumes, only one entering and one exiting lane would be required. 4) Until signalization is warranted, the side street approach exiting the outparcel tracts should be controlled by side street stop sign and accompanying stop bar.

#### **Dawsonville Highway at Ahaluna Drive**

1) The review of Georgia DOT auxiliary lane standards indicates that a northbound right turn lane should be added on GA 53 at Ahaluna Drive in the existing condition. 2) The future volumes exiting Ahaluna Drive would benefit from the addition of a second westbound lane, resulting in a shared left/through lane and an exclusive right turn lane on Ahaluna Drive at GA 53. This second lane would reduce the demand for side street green time on the signal and improve side street levels of service. It was noted that the need for relocation of the signal steel strain pole, a drainage structure, and possibly a large brick monument sign, may reduce the feasibility of adding this second westbound lane. 3) With the addition of Lanier Tract DRI southbound left turns, consideration should be given to adding a protected / permissive southbound left turn phase, which would match the existing protected / permissive phasing for the northbound left turn. The Georgia DOT left turn phase warrants are not satisfied for this southbound left turn based on volume projections alone. However, other factors such as high speeds on GA 53 and the senior residents expected to reside at the Lanier DRI, merit consideration. 4) Field observations suggest that there may be an opportunity to shorten the cycle length, which would reduce time spent by vehicles waiting on the side street.



### **Dawsonville Highway at North Lake Square Access**

This intersection operates acceptably in all analysis conditions. The side street approaches do incur some delays at all times, primarily due to the long cycle length on the signal, which allocates most of the green time, appropriately, to GA 53. The side street delays are incurred by minimal volumes in the a.m., since the retail served by the side streets are generally not operational at that time. Higher volumes incur the side street delays in the p.m., when the retail is operational. However, overall this intersection operates appropriately and no mitigation is recommended for any analysis condition.

### **Dawsonville Highway at Beechwood Boulevard**

At the GA 53 / Beechwood Boulevard intersection, it is noted that a fourth leg is currently stubbed-out across from Beechwood Boulevard and a retail development is under construction on that site. Auxiliary left and right turn lanes are provided on GA 53 serving Beechwood Boulevard and the future fourth leg appears to be designed for right-in / right-out access only, with a northbound deceleration lane provided on GA 53. No other changes are recommended at this intersection based on this study.

### **Dawsonville Highway at McEver Road**

The lane configuration and signal phasing at this intersection are generally appropriate. 1) The existing southbound right turn volume is sufficiently-high (828 a.m., 481 p.m.) to merit consideration of the addition of a second exclusive right turn lane and/or the addition of a protected right turn overlap phase. The justification for adding this phasing and/or second right turn lane will increase as volumes increase. 2) Finally, there may be an opportunity to reduce the cycle length and fine-tune the signal timing at this intersection.

### **Dawsonville Highway at Green Hill Circle**

This signalized intersection incurs high side street delays, again, due to the allocation of the majority of green time to the Dawsonville Highway approaches. 1) There may be an opportunity to reduce the cycle length and fine-tune the signal timing at this intersection.

### **Dawsonville Highway at Shallowford Road**

The lane configuration and signal phasing are appropriate for this intersection. 1) Reduction of the cycle and optimization of the allocation of green time could reduce delays and queuing at this intersection.

### **▪ Other Departmental Comments**

The Gainesville Public Works Department has recommended additional transportation improvements which are stated within the traffic zoning conditions listed below.

The Gainesville Department of Water Resources states that the City currently has adequate water and sanitary capacity for the proposed development. The developer will be required to construct extensions for both water and sanitary sewer to connect the existing City facilities, along with pump stations required for areas of the development unable to utilize gravity sanitary sewer for conveyance.

The Gainesville Police Department's primary concern will be the increased traffic accidents from the additional cars on the Dawsonville Highway corridor.

### **▪ Zoning History**

*The following zoning actions have taken place in the immediate area during the last ten years:*

**2015** – A request by West Ahaluna, LLC to annex a 8.74± acres tract with a zoning of Residential-I-A (R-I-A) located at 0 and 1264 Ahaluna Drive was conditionally approved for no proposed use.

**2014** – A request by West Ahaluna, LLC to annex a 70.23± acres tract with a zoning of Planned Unit Development (P-U-D) located at 0 and 1817 Ahaluna Drive; 1982 Dawsonville Highway; 2208 Karen Lane; 2008, 2016 and 2029 Strickland Drive was approved with conditions. In addition, the same applicant requested to rezone a 31.93± acres tract located at 0 Ahaluna Drive NW and 1489 West Lake Drive NW from Residential-I (R-I) to Planned Unit Development (P-U-D) which was also approved with conditions for a 199-lot single-family subdivision.

**2013** – A request by America's Home Place, Inc. to rezone a 25.11± acres tract located at 0 and 1198 Dawsonville Highway; 1232 Ahaluna Drive and 1162 Lakeshore Circle from Residential-I (R-I), Residential-II (R-II) and Office and Institutional (O-I) to General Business (G-B) zoning for a commercial shopping center was approved with conditions.

**2012** – A request by America's Home Place, Inc. to rezone a 4.711± acres tract located at 0, 1122, 1138, 1162 and 1198 Dawsonville Highway from Residential-II (R-II), Office and Institutional (O-I) and General Business (G-B) to General Business (G-B) zoning for retail, restaurant and vehicle service uses was approved with conditions.

**2011** – A request by Kauffman Tire Inc. for a special use within Regional Business (R-B) zoning on a 1.19± acres tract located at 801 & 805 Dawsonville Highway was approved with conditions for an automotive tire and service store.

**2010** – A request by Bill Dupree to annex a 7.11± acres tract with General Business (G-B) zoning and rezone a 2.44± acres tract from Residential-II (R-II) to General Business (G-B) located at 0, 1293, 1297 and 1139 Dawsonville Highway was approved with conditions for a business center with retail, office and restaurant uses.

#### ▪ **Staff Analysis**

##### **(1) Is the proposed use suitable in view of the zoning and development of adjacent and nearby property?**

The adjacent and nearby property includes mostly single-family homes located within unincorporated Hall County and are zoned Agricultural Residential-III (AR-III), Residential-I (R-I) and Vacation Cottage (V-C). The existing housing consists of a mixture of small cottage homes and newer large lake homes on lot sizes ranging from 10,000 square feet to over five acres. The proposed use was previously planned and was approved in Hall County for a 95-unit development. The applicant is proposing a similar development with a total of 90-units which is suitable given the approved use for the property.

##### **(2) Will the proposed use adversely affect the existing use or usability of adjacent or nearby property?**

Given the proposal is for an active adult community, there should be less of an impact on the surrounding properties, roads and the Gainesville City School System than if the property were developed as a traditional single-family subdivision.

The proposed use will add additional traffic and have impacts to traffic movements along Dawsonville Highway and its intersection with Sportsman Club Road. Transportation

improvements as identified within the traffic study and zoning conditions will be necessary to help reduce negative impacts to Dawsonville Highway and nearby intersections.

The proposed development is located adjacent to Lake Lanier. Environmental impacts should be properly mitigated through improved storm water measures. Sedimentation ponds and bioretention areas will be required within the development to help protect the lake. The applicant is proposing underground storm water detention for the development.

**(3) Is the proposed use compatible with the purpose and intent of the Comprehensive Plan?**

The Gainesville 2030 Future Development Map for the City of Gainesville places the subject property within the *Low-Medium Density Residential* land use category which includes areas containing or planned for single-family detached or semi-detached housing at densities up to 4.0 dwelling units per acre. The proposed Planned Unit Development (P-U-D) zoned portion of the proposal seeks a density of 3.43 dwelling units per acre.

According to the Character Area map for the City of Gainesville, the subject property is located within the *Suburban Residential* character area. The goal of this character area is to preserve older, stable residential subdivisions and encourage newer projects with smaller lot sizes, pedestrian infrastructure, and buildings patterned after traditional local housing, possibly containing a small neighborhood-serving "village center". Mixed-use neighborhood design is desired but not required. In areas where natural features or sensitive environments are important, cluster housing or conservation subdivision design may be appropriate. Community access points and shoreline restoration are encouraged as part of future development on greenfield parcels between Dawsonville Highway and Lake Lanier. Land uses allowed within this area include low-density residential, medium density residential, multi-family residential, public / institutional, commercial, and parks / recreation / conservation and mixed-use.

**(4) Are there substantial reasons why the property cannot or should not be used as currently zoned?**

The development proposes to utilize city water and sewer services, which requires the property to be annexed when contiguous to the city limits. The subject property was previously approved for a similar project in Hall County; however the property was not adjacent to the city limits at that time.

**(5) Will the proposed use cause an excessive or burdensome use of public facilities or services, including but not limited to streets, schools, water or sewer utilities, and police or fire protection?**

As the development builds out, additional vehicular traffic will increase at the intersection of Dawsonville Highway and Sportsman Club Road. The proposed use did not meet the thresholds to require an independent Traffic Impact Study. However, the proposed 90-residential units were added to the Traffic Impact Study submitted with the adjacent mixed-use development. A summary of this study is provided above within this staff recommendation report. According to the study this 90-unit development at build out would generate an average of 290 new trips per weekday, 18 A.M. peak hour trips and 23 P.M. peak hour trips at full occupancy. The entire project combined will generate 189 new trips in the a.m. peak hour, 274 new trips in the p.m. peak hour, and 3,387 new trips during a 24-hour weekday. The improvements as identified within the study and the proposed zoning conditions are strongly recommended by staff to help mitigate some of the traffic concerns.

The proposed annexation will increase the load on water and sewer services; however, sewer and water is available and there is sufficient capacity to serve the development.

Existing public safety services respond to the adjacent and nearby properties and Gainesville Fire Station #1 is located approximately 3.8 miles away from the furthest proposed residential lot. As well, Hall County Fire Station #13 off of Sardis Road is also located approximately 3.4 miles away. Gainesville and Hall County currently have an "automatic aid" agreement for emergency services that was first established in 1997. The agreement allows the agency that is closest to an incident to respond despite municipal boundaries. Regardless, the amount of proposed single-family homes will put additional strain on fire services due to the subject properties proximity to the existing city limits which could impact the City's ISO rating. However, the adjacent mixed-use development proposes a 3.0 acres tract of land to be reserved for a future City fire station.

According to the Gainesville Police Department, increased traffic accidents from the additional cars on the Dawsonville Highway corridor are a primary concern.

Impacts to the school system are expected to be minimal as the development is designed as an age restricted community for individuals over the age of 55. However, there may be a small number of school aged children that will live in the community. No comments or concerns were received by the school system regarding this request.

**(6) Is the proposed use supported by new or changing conditions not anticipated by the Comprehensive Plan or reflected in the existing zoning on the property or surrounding properties?**

The proposed use is consistent with the Gainesville Comprehensive Plan and is within acceptable density range. The property is located within a residential area between Dawsonville Highway and Lake Lanier, and is just north of Gainesville's most active regional commercial corridors. Existing uses along Dawsonville Highway south of the bridge consists of mostly commercial in nature excluding a few large apartment complex developments (Park Creek, Carrington Park and Lake Lanier Club), and some isolated single-family homes within Hall County. Numerous properties fronting this segment of Dawsonville Highway have been developed for non-residential purposes over the past 15 to 20 years. Some examples of this include the Northlake Square shopping center, Carrington Park retail center, Village Shoppes of Gainesville, Home Depot, Best Buy, McEver Corners shopping center, Texas Roadhouse, Olive Garden, Cheddar's, Buffalo Wild Wings and a child day care facility. A 94-room Holiday Inn Express is currently under construction behind the Cheddar's restaurant.

The proposed active-adult community appears to be of high quality and would serve as an appropriate transitional use for the area between Dawsonville Highway and the residential uses adjacent to Lake Lanier. As well, the proposed use is consistent with the housing proposed within the adjacent mixed-use development proposed to the south.

**(7) Does the proposed use reflect a reasonable balance between the promotion of the public health, safety, morality, or general welfare and the right to unrestricted use of property?**

Due to the subject property's proximity to existing residential and commercial land uses, the proposed use, with the recommended conditions of zoning appears to promote a reasonable balance between the interests of the City, the property owner, and neighboring residents and property owners.

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▪ **Staff Recommendation**

The Planning Division staff is recommending **conditional approval** of this request based on the Comprehensive Plan and the adjacent residential and non-residential land uses.

**Conditions**

**Development Standards**

1. The development standards within the applicant's narrative, concept plan and architectural renderings shall be made part of the zoning ordinance, and shall be subject to the Community Development Director approval. Any zoning conditions adopted as part of this zoning ordinance that conflict with the applicant's narrative, concept plan and architectural renderings shall take precedence over the applicant's development standards.
2. The approved use for the property shall be limited to an active adult community for seniors not to exceed 90 terrace homes / townhome units as stated within the applicant's revised concept plan and narrative.
3. The development shall comply with applicable U. S. Department of Housing and Urban Development (HUD) rules for age-restricted communities. The organization established for the management of the development shall comply with HUD rules for verification of occupancy and shall maintain procedures for routinely determining the occupancy of each unit. Such procedures may be part of a normal leasing or purchasing agreement and must provide for regular updates as required by HUD.
4. A minimum 50-foot perimeter buffer shall be required against all adjacent roads and the adjacent private properties. The exterior 25 feet of this perimeter buffer will be undisturbed, except where disturbance is required for erosion control, storm water management, or the installation of utilities; the interior 25 feet of this buffer may be graded and replanted. Any additional plantings required will be in accordance with City of Gainesville's Buffer Standards. The Community Development Director shall have the final determination on the number, location and type of trees to be planted, as required by Article 9-16 of the Unified Land Development Code.
5. The minimum heated floor space for the terrace homes / townhomes shall be 1,100 square feet.
6. Covenants shall be put in place by the developer restricting against the parking of boats, trailers, and campers within driveways.
7. The proposed amenity clubhouse shall include a minimum 3:12 roof pitch and exterior facade materials shall be similar in architecture to the proposed terrace homes / townhomes.
8. A Uniform Sign Plan as identified within Section 9-18-7-4 of the Unified Land Development Code shall be required from the developer and is subject to approval by the Gainesville Community Development Director. All signs associated with

residential uses shall be limited to indirect lighting. All signs shall be located outside of utility areas and shall not block visibility of vehicular traffic.

9. The proposed erosion control and water quality measures for the development shall at minimum meet the Georgia Storm Water Management Manual requirements. Storm water management for the development must provide water quality treatment for no less than 110% of the State required treatment volume. The City of Gainesville shall approve the final design of all water quality measures.

#### **Transportation / Traffic**

10. Prior to the issuance of a land disturbance permit, the developer shall provide a signal warrant analysis be performed per Georgia Department of Transportation (GDOT) standards for the following intersection:

- a. Dawsonville Highway (SR 53) at Sportsman Club Road

All costs associated with the signal warrant analysis study and, if warranted by such study, any costs associated with the installation of a traffic signal and intersection improvements shall be at the full expense of the developer.

11. The developer shall perform the following traffic improvements identified within the Summary of Study Findings and Recommendations as stated within the revised Traffic Impact Study, dated April 7, 2017, for the proposed development:

- a. Dawsonville Highway (SR 53) at Sportsman Club Road; add a northbound exclusive right turn lane on Dawsonville Highway (SR 53).

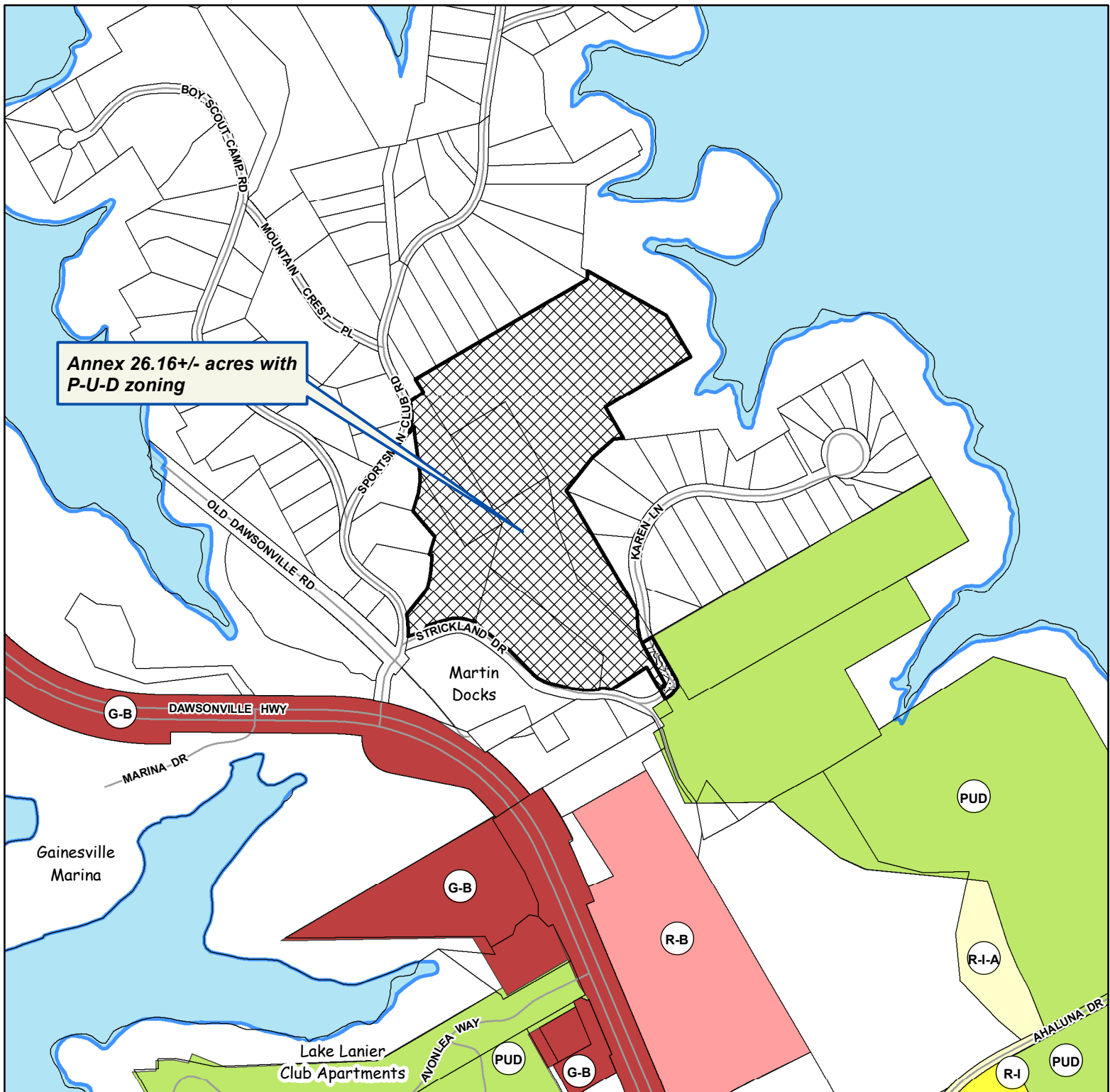
The developer shall coordinate these improvements with GDOT and the Gainesville Public Works Director prior to permitting. The Gainesville Public Works Director and GDOT shall have the final determination of the time line of these improvements based on the developer's proposed construction schedule. All costs associated with the improvements shall be at the full expense of the developer.

12. Prior to the issuance of a land disturbance permit, the developer shall evaluate, design and construct the left turn lane on Dawsonville Highway (SR 53) and Sportsman Club Road to meet GDOT storage and design requirements. If the existing left turn lane at this location meets these requirements, this condition will be deemed satisfied.

13. Prior to the issuance of a land disturbance permit, the intersection of Strickland Drive, Karen Lane and the new access road to the proposed development shall be redesigned to include realignment for better traffic circulation, and to meet current roadway design criteria. The improvements shall be completed prior to permitting direct access from the development onto Karen Lane and Strickland Drive and prior to the construction of the most northern Pod of terrace and cottage homes. All costs associated with the improvements shall be at the full expense of the developer.

14. All new streets shall meet the standards within the current Gainesville Unified Land Development Code. All proposed residential uses and amenities shall provide for pedestrian connectivity throughout the development. All costs associated with the improvements shall be at the full expense of the developer.

15. Prior to the issuance of a land disturbance permit, the developer shall seek documentation from Hall County to verify that no improvements will be required to the intersection of Sportsman Club Road and Strickland Drive.
16. Access to the development shall be from either Strickland Drive or Karen Lane; provided that if the application to annex and rezone the adjacent 188.78± acres tract zoned Planned Unit Development (P-U-D) submitted concurrently with this application is not approved, access to this development shall be from Strickland Drive. In either case, there shall be no driveways from individual homes allowed onto Sportsman Club Road, Strickland Drive or Karen Lane.



Applicant:

## ANNEXATION REQUEST

OAK HALL COMPANIES, LLC



### Request:

Annex 26.16+/- acres with Planned Unit Development (P-U-D) zoning for an active adult community

### Subject Area Address:

2049 Strickland Drive; 2106, 2234 and 2242 Sportsman Club Road; 0 and 2209 Karen Lane

Meeting: 5/9/2017

Prepared: 3/14/2017

Gainesville Community Development Department



Subject Property



Right of Way to be Annexed



0 330 660 990 1,320 Feet

1" = 550'

Tax Parcel: 00-109-003-001, 004, 005;  
00-109B-000-001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, 016, 017, 018, 019, 020, 021, 022, 023, 024, 025, 026, 027, 028, 029, 030, 031, 032, 033, 034, 035, 036, 037, 038, 039, 040, 041, 042, 043, 044, 045, 046, 047, 048, 049, 050, 051, 052, 053, 054, 055, 056, 057, 058, 059, 060, 061, 062, 063, 064, 065, 066, 067, 068, 069, 070, 071, 072, 073, 074, 075, 076, 077, 078, 079, 080, 081, 082, 083, 084, 085, 086, 087, 088, 089, 090, 091, 092, 093, 094, 095, 096, 097, 098, 099, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120





Applicant:

## ANNEXATION REQUEST

OAK HALL COMPANIES, LLC



**Request:**

Annex 26.16+/- acres with Planned Unit Development (P-U-D) zoning for an active adult community

**Subject Area Address:**

2049 Strickland Drive; 2106, 2234 and 2242 Sportsman Club Road; 0 and 2209 Karen Lane

Meeting: 5/9/2017

Prepared: 3/14/2017

Gainesville Community Development Department



Subject Property

Aerial from 2015

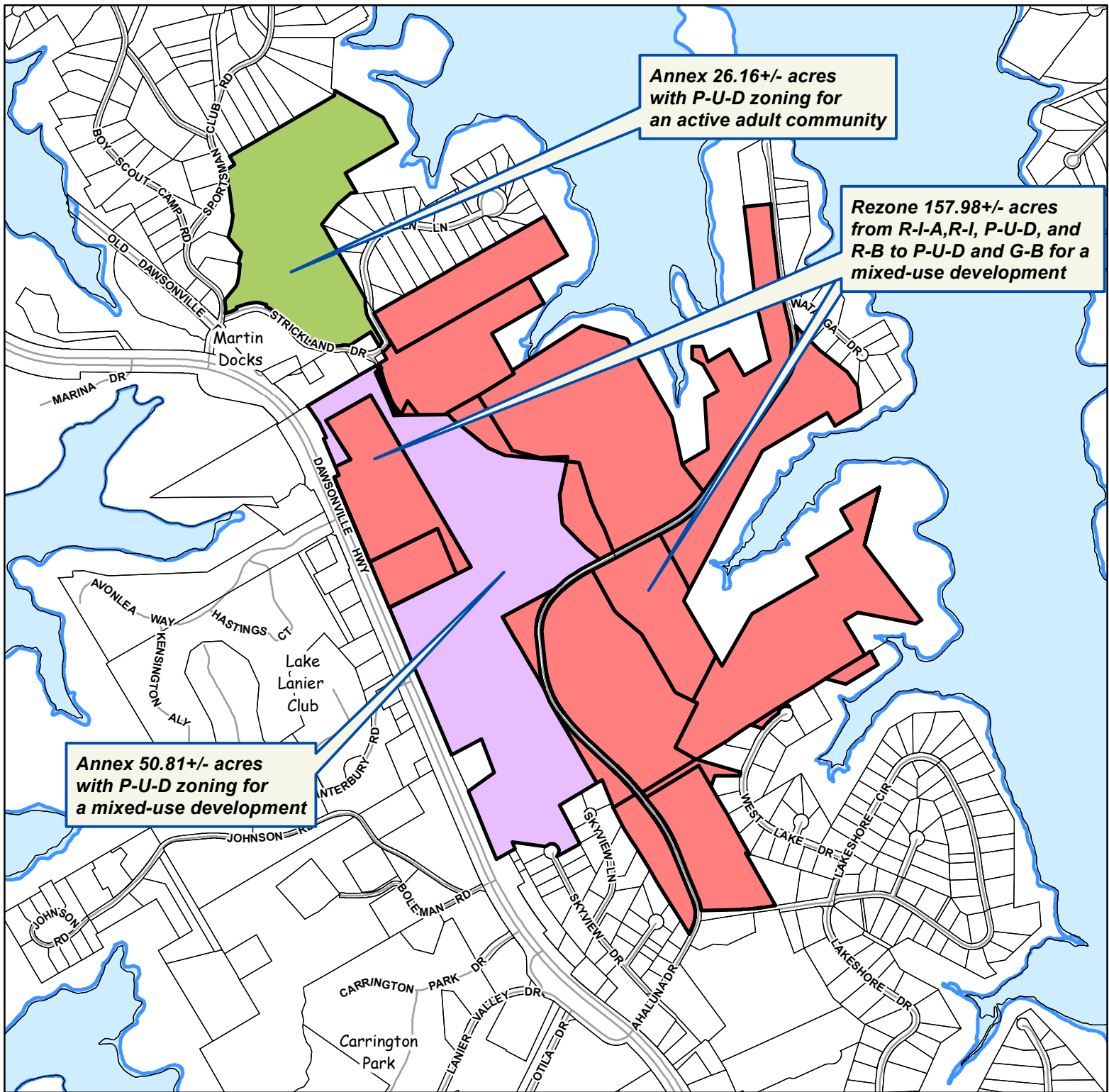
0 330 660 990 1,320 Feet



1" = 550'

**Tax Parcel:** 00-109-003-001, 004, 005;  
00-109B-000-001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, 016, 017, 018, 019, 020, 021, 022, 023, 024, 025, 026, 027, 028, 029, 030, 031, 032, 033, 034, 035, 036, 037, 038, 039, 040, 041, 042, 043, 044, 045, 046, 047, 048, 049, 050, 051, 052, 053, 054, 055, 056, 057, 058, 059, 060, 061, 062, 063, 064, 065, 066, 067, 068, 069, 070, 071, 072, 073, 074, 075, 076, 077, 078, 079, 080, 081, 082, 083, 084, 085, 086, 087, 088, 089, 090, 091, 092, 093, 094, 095, 096, 097, 098, 099, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120





Applicant:

## ANNEXATION AND REZONING REQUEST

OAK HALL COMPANIES, LLC



### Request:

Rezoned 157.98+/- acres from R-I-A, R-I, P-U-D, and R-B to P-U-D and G-B and annex 76.97+/- acres with P-U-D zoning for a mixed-use development/active adult community

### Subject Area Address:

See attached list

Meeting: 5/9/2017

Prepared: 2/16/2017

## Gainesville Community Development Department

- Annex 26.16+/- Acres
- Annex 50.81+/- Acres
- Rezoned 157.98+/- Acres



0 540 1,080 1,620 2,160 Feet

1" = 900'

Tax Parcel: See attached list

REVISED 2017-04-17

**NARRATIVE REPORT, LAND USES AND DEVELOPMENT SUMMARY, IMPROVEMENT REQUIREMENTS  
COMPARISON, AND COMMUNITY BENEFIT STATEMENT FOR ANNEXATION APPLICATION**

|                             |                                                                                                                                                          |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Applicant:</b>           | <b>Oak Hall Companies, LLC</b>                                                                                                                           |
| <b>Annexation Property:</b> | <b>26.16 Acres Designated as Hall County Tax Parcel(s):<br/>00109B000001, 00109003004, 00109003005, and<br/>00109003001, 00109B000002A, 00109B000036</b> |
| <b>Current Zoning:</b>      | <b>PRD</b>                                                                                                                                               |
| <b>Proposed Zoning:</b>     | <b>PUD</b>                                                                                                                                               |
| <b>Proposed Use:</b>        | <b>Planned Unit Development, with 90 Age-Restricted, Single-Family Attached Dwellings (townhouses)</b>                                                   |
| <b>ROW Access:</b>          | <b>Karen Lane</b>                                                                                                                                        |

This statement is intended to comply with the application procedures established by The City of Gainesville, GA for submittal of applications for annexation as required by the City of Gainesville Unified Land Development Code (the "ULDC"), City of Gainesville Public Hearing Application Requirements, and other City of Gainesville Ordinances and Standards and is intended to serve as the Narrative Report required by the ULDC. As part of this Narrative Report, the Applicant asserts the statements contained in the Application for annexation package, submitted herewith incorporated herein by reference, and as may be amended (the "Application"), describing justification for the requested annexation, zoning and for any request of variances, in any, as if such were fully stated herein.

The Applicant proposes to develop the Proposed Use on the Subject Property. The Applicant requests to annex into the City of Gainesville the Annexation Property, which is currently located in unincorporated Hall County. The proposed annexation would not create an unincorporated island in violation of O.C.G.A. § 36-36-4. In the event the annexation is approved, there will be contiguity between any remaining unincorporated lands.

**I. Land Uses and Development Summary**

The Applicant proposes to develop the Proposed Use on the Annexation Property. The Subject Property is adjoined by residential dwellings along Lake Lanier to the north (zoned R-I), east (zoned R-I, AR-III, PUD, V-C), residential dwellings to the south (zoned AR-III), and by residential dwellings to the southwest, along zoned properties to the southwest, along SR53 (zoned R-I).

The Proposed Use is consistent with the intent of the Comprehensive Plan and the Future Development Map. The Annexation Property is depicted on the Gainesville 2030 Comprehensive Plan, as Low Density

Residential (1 to 4 Dwelling Units per Acre). To accomplish this, the Applicant proposes to utilize the PUD zoning category, with a residential density of 3.43 units per acre.

#### **A. Zoning and Land Use**

The Applicant proposes to subject the Annexation Property to the land uses and performance standards depicted on the Willow Springs Concept Plan, dated April 14, 2017, prepared for Oak Hall Companies, LLC by Site Development Consultants, Inc. (the “**Concept Plan**”), submitted concurrently with this Application and incorporated by reference. In addition, the Applicant also proposes to subject the PUD Annexation Property to the **PUD Performance Standards**, attached to and incorporated with this Narrative Report for Annexation.

#### **B. Traffic Impact Analysis**

The Applicant also submits with this Narrative Report, and incorporates herein, a Trip Generation Report and Traffic Study Network Determination.

Permanent access to the development will be from the ROW Access. All of the development’s interior streets and driveways will be publicly-owned and maintained.

Traffic generated from the development will be minimal and the entrance will be at a location where sight distance is sufficient. All curb cuts shall be coordinated and approved by the City of Gainesville and GDOT and acceleration and deceleration lanes will be installed as required. All streets within the development will be constructed to conform to standard requirements. Parking will be provided onsite as required by the ULDC.

#### **C. School System**

As the Annexation Property will be age-restricted use, impact on schools will be minimal.

#### **D. Utilities**

With regard to public utilities, water, sanitary sewer, electricity and cable are available to the site. The development’s water and sewer needs will be served by the City of Gainesville. The Applicant will install underground utility lines within the development to serve the project on an as-needed basis.

#### **E. Economic Impact**

The Applicant submits and incorporates herein the attached **Economic Impact Statement**. The calculations therein assume the owners of the residential units will have no children and be exempt from School Property Taxes. The number of residents with children will be nominal, and any such persons would likely be required to pay School Property Taxes.

**F. Environmental Impact**

The project should also have a minimal impact on the environment. There should be no impact on air quality. Drainage, soil erosion, and sedimentation controls will be extensively utilized on the site after obtaining all required approvals from the Soil Conservation Service and the City of Gainesville. Best management practices will be utilized to protect natural resources. The Applicant will submit plans detailing the development for approval by all applicable and appropriate governmental agencies, based on conformity with subdivision and zoning requirements, as well as other applicable ordinances, statutes and regulations.

**II. Improvement Requirements Comparison**

|                   | <u>City Standards</u>                                                                   | <u>Proposed Standards</u>                 |
|-------------------|-----------------------------------------------------------------------------------------|-------------------------------------------|
| ROW Widths        | 50 feet                                                                                 | 50 feet                                   |
| Pavement Widths   | 24 feet                                                                                 | 24 feet                                   |
| Sidewalk Width    | 4 feet                                                                                  | 4 feet                                    |
| Sidewalk Location | At least 1 side of each residential road, with connector sidewalks to commercial areas. | At least 1 side of each residential road. |

**III. Community Benefit Statement**

The community will benefit from the Proposed Use, which will provide high quality housing for seniors, improved fire service, and commercial and recreational benefits to the community. The Proposed Use will have little impact on school attendance, as most age-restricted units will not house school-aged children. Residents of age-restricted housing also tend to drive less and, when they do, they drive during off-peak hours, thereby lessening the impact on community traffic.

The Proposed Use will provide quality architectural designs, and extend utility services to areas currently unserved by water and sewer. The Proposed Use will also improve road access on Ahaluna Drive.

**CONCLUSION**

Approval of the Application will be in the best interest of the City. The Applicant respectfully requests that the Application, as requested by the Applicant, be approved. The Applicant also reserves the right to amend this statement and the Application by supplementing further responses and documents.

Sincerely,



Ethan Underwood,  
Attorney for the Applicant

# **Willow Springs PUD - Residential Performance Standards**

## **RESIDENTIAL USE**

Maximum 90 Age-Restricted, active adult dwellings on 26.16 acres with a gross density of approximately 3.43 residential units per acre.

## **AGE RESTRICTION**

Each residential unit shall, at a minimum, have 80% of the occupied units be inhabited by at least one person 55 years of age or older.

## **BUILDING MATERIALS**

Exteriors of all homes and residential structures constructed on the subject property must be of brick, stone, hard coat stucco, or a cement-based material such as hardi-board. Accent materials such as, but not limited to, copper roofing, cedar shake, a cement-based material such as hardi-board, or a combination of such materials, may be used with such accent material not to exceed fifty percent (50%) of the facade. There shall be no vinyl or aluminum siding.

The roofing material used on all detached homes must be cedar shake, architectural/dimensional style asphalt shingles or metal as appropriate to the architectural style of each home.

## **PROPERTY OWNER ASSOCIATIONS**

The development shall have covenants that require maintenance of the landscaped entrance area, open space, and amenity areas by a homeowners association. Membership in the homeowners association is mandatory for owners of properties.

## **AMENITIES**

An amenity area, including a swimming pool and club house, will be available in adjoining senior housing community.

On-street parking will be allowed for the amenity area. On-street parking will be the responsibility of the homeowner's association to maintain.

## **UNIT TYPE**

Independent living products will consist of 90 Age-Restricted, Single Family Attached Dwellings (townhouses).

## I. Attached Residential

| Type                                            | Maximum # of Units |
|-------------------------------------------------|--------------------|
| • Dwelling, single-family attached (townhouses) | 90 units           |

The building footprint for each unit will comprise the boundaries of the individual lots; all other improved areas will be maintained by a mandatory homeowner association as “common area” and all undeveloped area will be maintained as “open space”.

### PERFORMANCE STANDARDS – ATTACHED RESIDENTIAL (TOWNHOUSES)

- Minimum unit width – 24 feet
- Minimum Heated Floor Area (1,100 sf)
- Maximum building height – 30 feet
- Each unit will have a minimum 2 car enclosed garage
- Each unit will have a minimum of 18 feet of driveway from the back of sidewalk to the building face or 20 feet from the back of the curb to the building when there is no sidewalk
- Setbacks, excluding steps, roof overhangs, chimneys, bay windows, and patios:
  - 0' front
  - 0' side
  - 0' interior rear
  - 10' separation between blocks of units





City Economic Impact Statement: Oak Hall Companies, LLC

|                      |             |  |                     |                 |                                           |                 |
|----------------------|-------------|--|---------------------|-----------------|-------------------------------------------|-----------------|
| Population           | 36,306      |  | Millage Rate        | 0.00298         | (Non-Public Safety)                       | \$ 9,657,458.00 |
| Households           | 12,967      |  |                     |                 | Local School Expenditures Per Child (40%) | \$ 3,401.41     |
|                      |             |  | School Millage Rate | 0.00685         | Police Expenditures                       | \$ 8,471,549.00 |
| Impact Fees per Unit | \$ 1,589.81 |  | Sales Tax Revenue   | \$ 5,036,730.00 | Fire Expenditures                         | \$ 6,542,453.00 |

| Table 1: Projected Residential Population |            |              |            |
|-------------------------------------------|------------|--------------|------------|
| Year                                      | New Houses | Total Houses | Population |
| 1                                         | 15         | 15           | 42         |
| 2                                         | 15         | 30           | 84         |
| 3                                         | 15         | 45           | 126        |
| 4                                         | 15         | 60           | 168        |
| 5                                         | 15         | 75           | 210        |
| 6                                         | 15         | 90           | 252        |

| Table 2: Projected Annual General Property Tax Revenue from Residential |      |             |
|-------------------------------------------------------------------------|------|-------------|
| Average Home Price                                                      | Year | Revenue     |
| \$325,000.00                                                            | 1    | \$14,438.10 |
|                                                                         | 2    | \$28,876.20 |
|                                                                         | 3    | \$43,314.30 |
| Avg. Prop Tax per                                                       | 4    | \$57,752.40 |
| \$963                                                                   | 5    | \$72,190.50 |

| Table 3: Projected Annual Sales Tax Revenue from Residential |             |
|--------------------------------------------------------------|-------------|
| Year                                                         | Revenue     |
| 1                                                            | \$5,826.40  |
| 2                                                            | \$11,652.80 |
| 3                                                            | \$17,479.20 |
| 4                                                            | \$23,305.61 |
| 5                                                            | \$29,132.01 |
| 6                                                            | \$34,958.41 |

| Table 4: Projected Annual School Property Tax Revenue from Residential (Assume 40% Exempt from School Tax) |      |              |
|------------------------------------------------------------------------------------------------------------|------|--------------|
| Average Home Price                                                                                         | Year | Revenue      |
| \$325,000.00                                                                                               | 1    | \$20,036.25  |
|                                                                                                            | 2    | \$40,072.50  |
|                                                                                                            | 3    | \$60,108.75  |
| Avg. Prop Tax per House                                                                                    | 4    | \$80,145.00  |
| \$2,226                                                                                                    | 5    | \$100,181.25 |
|                                                                                                            | 6    | \$120,217.50 |

| Table 5: Projected Residential Impact Fees: One Time Fee per Annum |              |
|--------------------------------------------------------------------|--------------|
| Year                                                               | Total        |
| 1                                                                  | \$ 23,847.15 |
| 2                                                                  | \$ 23,847.15 |
| 3                                                                  | \$ 23,847.15 |
| 4                                                                  | \$ 23,847.15 |
| 5                                                                  | \$ 23,847.15 |
| 6                                                                  | \$ 23,847.15 |

| Table 6: Cost of Law Enforcement Services |                  |                                     |
|-------------------------------------------|------------------|-------------------------------------|
| Year                                      | Total Households | Annual Law Enforcement Expenditures |
| 1                                         | 15               | \$9,799.74                          |
| 2                                         | 30               | \$19,599.48                         |
| 3                                         | 45               | \$29,399.22                         |
| 4                                         | 60               | \$39,198.96                         |
| 5                                         | 75               | \$48,998.70                         |
| 6                                         | 90               | \$58,798.44                         |

| Table 7: Cost of Fire Protection Services |                  |                          |
|-------------------------------------------|------------------|--------------------------|
| Year                                      | Total Households | Annual Fire Expenditures |
| 1                                         | 15               | \$7,568.20               |
| 2                                         | 30               | \$15,136.39              |
| 3                                         | 45               | \$22,704.59              |
| 4                                         | 60               | \$30,272.78              |
| 5                                         | 75               | \$37,840.98              |
| 6                                         | 90               | \$45,409.17              |

| Table 8: M&O Expenditures |                  |                         |
|---------------------------|------------------|-------------------------|
| Year                      | Total Households | Annual M&O Expenditures |
| 1                         | 15               | \$11,171.58             |
| 2                         | 30               | \$22,343.16             |
| 3                         | 45               | \$33,514.74             |
| 4                         | 60               | \$44,686.32             |
| 5                         | 75               | \$55,857.90             |
| 6                         | 90               | \$67,029.48             |

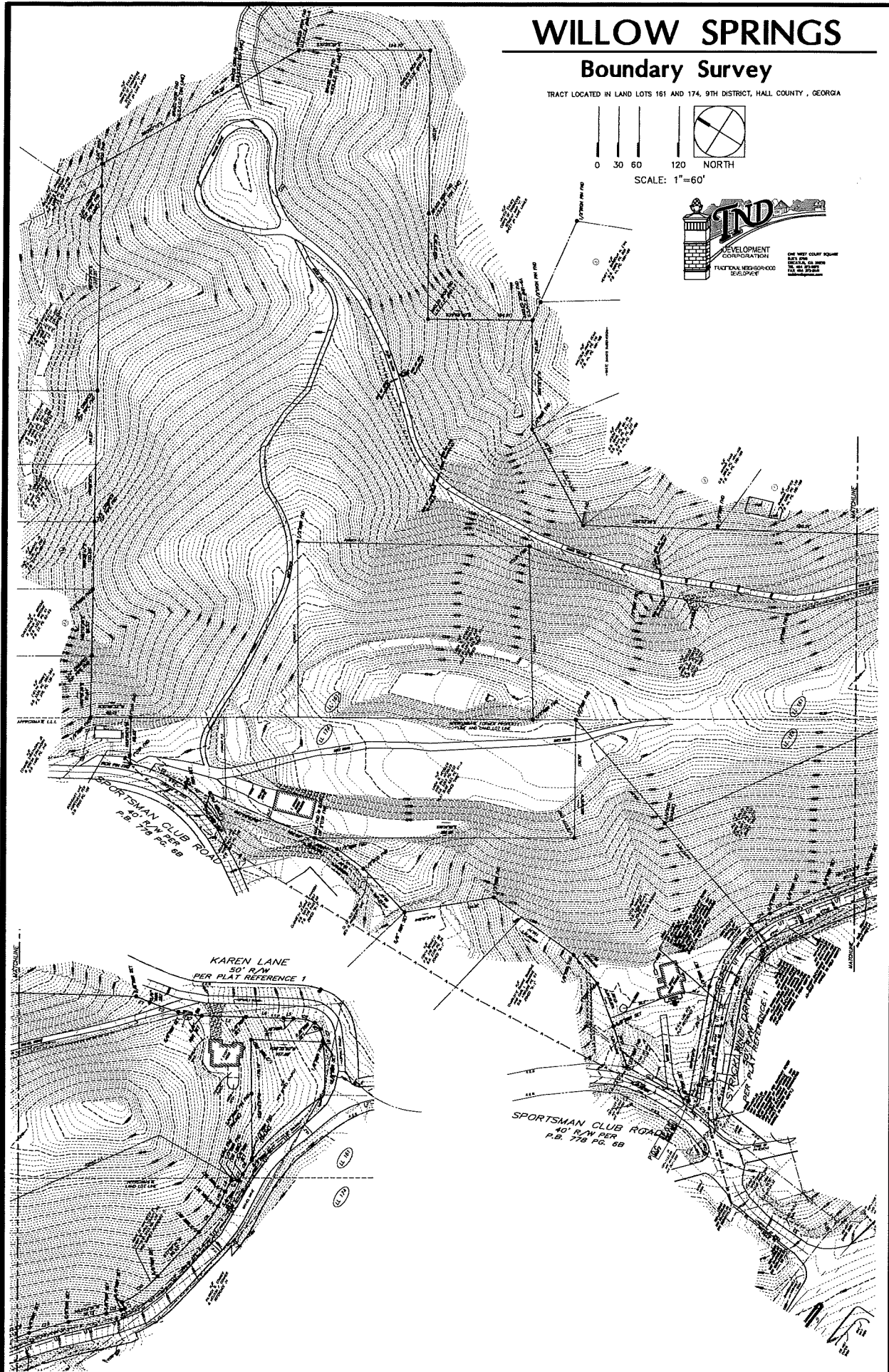
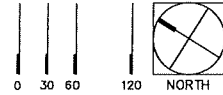
| Table 9: Summary of Annual Impact at Completion           |         |                     |
|-----------------------------------------------------------|---------|---------------------|
| Impact Summary                                            | Column1 | Totals              |
| <b>Revenues</b>                                           |         |                     |
| Property Taxes to                                         |         | \$192,408.00        |
| Sales Taxes to City                                       |         | \$34,958.41         |
| Total Revenue                                             |         | \$227,366.41        |
| <b>Expenditures</b>                                       |         |                     |
| Police                                                    |         | \$58,798.44         |
| Fire                                                      |         | \$45,409.17         |
| M&O                                                       |         | \$67,029.48         |
| School Expenditures (1% of Homes have a school-age child) |         | \$8,571.17          |
| Total Expenditures                                        |         | \$179,808.26        |
| Annual Net Revenue                                        |         | \$47,558.15         |
| <b>Total Impact Fees</b>                                  |         | <b>\$143,082.90</b> |



# WILLOW SPRINGS

## Boundary Survey

TRACT LOCATED IN LAND LOTS 161 AND 174, 9TH DISTRICT, HALL COUNTY, GEORGIA





PROJECT DATA

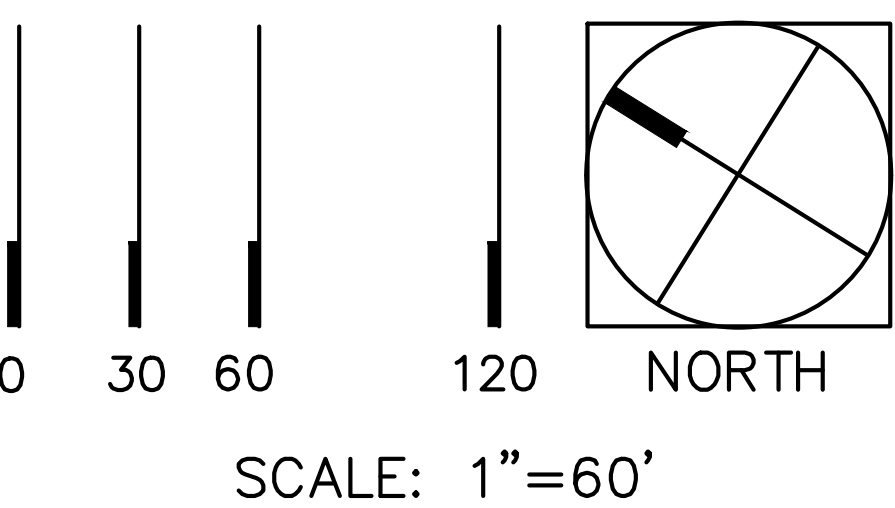
|                                     |                                     |
|-------------------------------------|-------------------------------------|
| SITE INFORMATION                    |                                     |
| CURRENT ZONING                      | PRD                                 |
| SITE AREA                           | 26.2 ACRES                          |
| RESIDENTIAL                         |                                     |
| SENIOR TERRACE HOMES                | 90 UNITS                            |
| DENSITY                             |                                     |
| OVERALL DENSITY                     | 90 UNITS/ 26.2 ACRES = 3.43 UN/ACRE |
| PARKING INFORMATION                 |                                     |
| SENIOR TERRACE HOMES PARKING PROVID | 4 SPACES/UNIT                       |
| GUEST PARKING PROVID                | 360 SPACES                          |
|                                     | 56 SPACES                           |
|                                     | 416 SPACES                          |



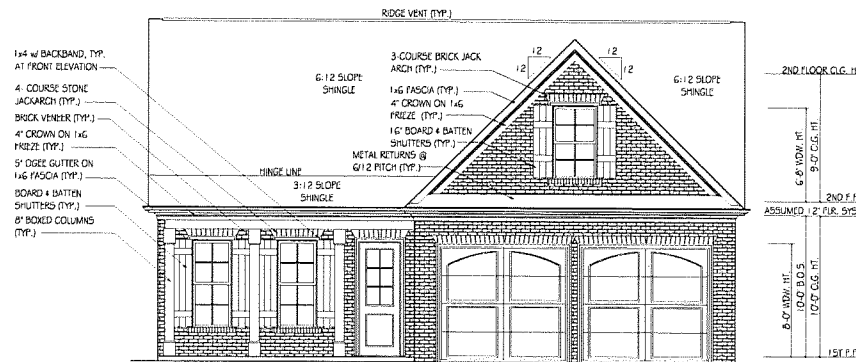
OAK HALL  
— COMPANIES LLC —

WILLOW SPRINGS  
CONCEPT PLAN

Prepared for  
Oak Hall Companies, LLC  
5256 Peachtree Road, Suite 195  
770-662-5995  
Atlanta, GA 30341  
DATE: 4/14/2017

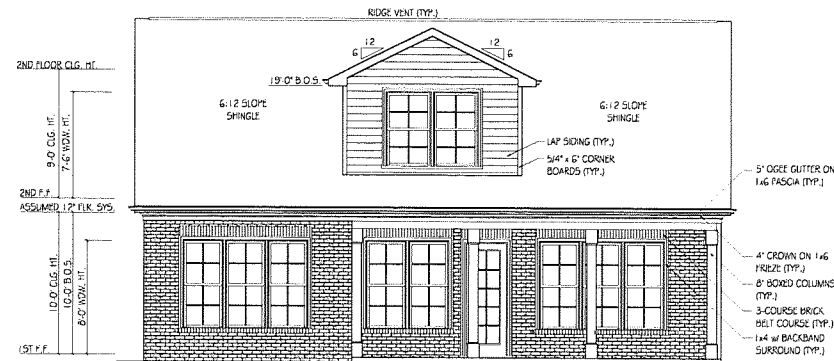






**FRONT ELEVATION**

1/4" = 1'-0"  
B.O.S. = BOTTOM OF SOFFIT



**REAR ELEVATION**

1/4" = 1'-0"  
B.O.S. = BOTTOM OF SOFFIT

**GENERAL NOTE:**

ALL DIMENSIONS SHOWN MAY VARY FROM ACTUAL SIZE CONDITIONS IN THE FIELD. THE NUMBER OF STAIRS, TREADS AND RISERS AT GARAGE, TERRACES, PORCHES, DECKS, ETC., ARE TO BE DETERMINED BY THE BUILDER / CONTRACTOR, ACCORDING TO ACTUAL CONDITIONS.

| TUBE           | JOB #                       |
|----------------|-----------------------------|
| 1203           | 15143                       |
| DATE           | REVISED                     |
| 08/19/16       |                             |
| SQUARE FOOTAGE |                             |
| 2303 SF        |                             |
| LOT #          | SUBDIVISION                 |
|                | THE OVERLOOK AT OLD ATLANTA |
| PROJECT        |                             |

**CUSTOM HOME FOR JIM CHAPMAN COMMUNITIES**

**THE NEWBURY -A**

**CLASSICAL CONCEPTS ATLANTA**

P.O. BOX 732  
FLOWERY BRANCH, GA. 30542

404-226-6964 404-401-7298  
(DAVID) (MARY)

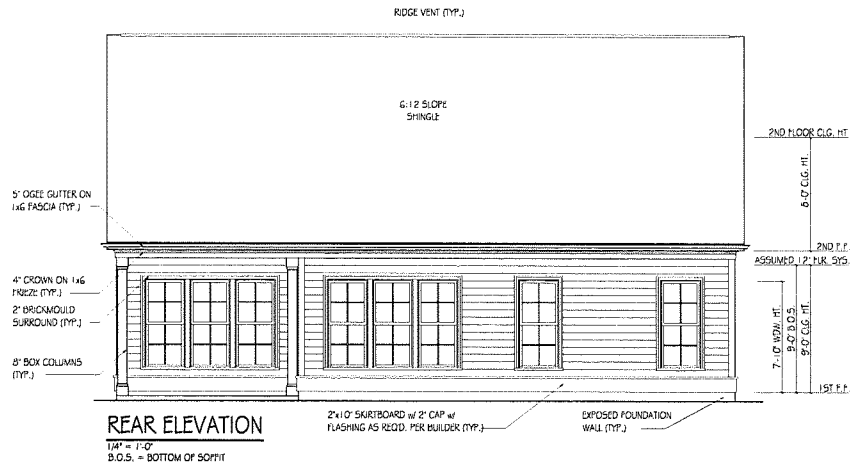
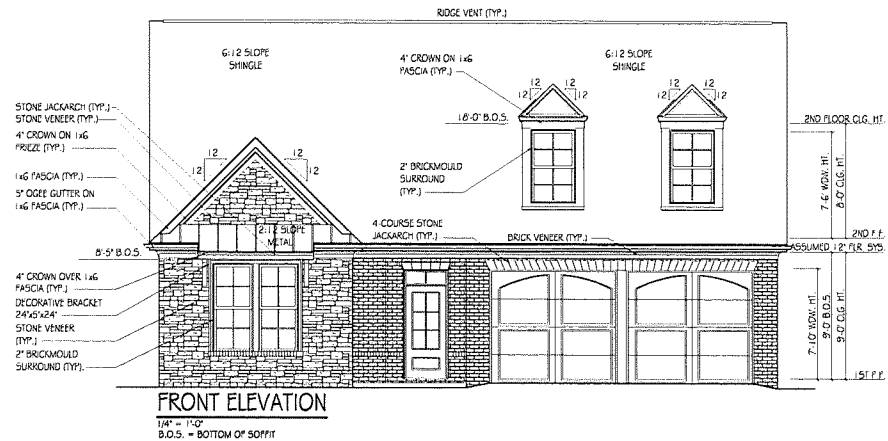
CCADORAN@YAHOO.COM  
MFITZDORAN@AOL.COM

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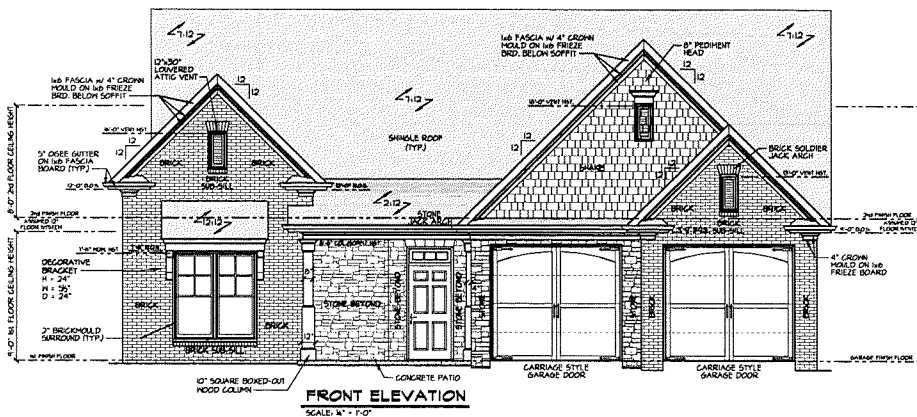
| DRAWN | SHEET # |
|-------|---------|
| BCLLC | D1 of 6 |





**GENERAL NOTE:**  
ALL GRADES SHOWN MAY VARY PER ACTUAL SITE CONDITIONS IN THE FIELD. THE NUMBER OF EXTERIOR STAIRS AND RISERS AT GARAGE, TERRACES, PORCHES, DECKS, ETC., ARE TO BE DETERMINED BY THE SUBMITTER. CONTRACTOR ACCORDING TO ACTUAL GRADES.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| TUBE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | JOB #                  |
| 1284                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 16179                  |
| DATE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | REVISED                |
| 09/10/16                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                        |
| SQUARE FOOTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                        |
| 2375 SF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                        |
| LOT #                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | SUBDIVISION            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | NESTLE DOWN FARMS      |
| PROJECT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                        |
| CUSTOM HOME FOR JIM CHAPMAN COMMUNITIES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                        |
| THE HANOVER - A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                        |
| CLASSICAL CONCEPTS ATLANTA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        |
| P.O. BOX 732<br>FLOWERY BRANCH, GA. 30542                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                        |
| 404-226-6964<br>(DAVID)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 404-401-7298<br>(MARY) |
| CCADORAN@YAHOO.COM<br>MFITZDORAN@AOL.COM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                        |
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| DRAWN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | SHEET #                |
| BCLLC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | D1 of 5                |



ALL GRADES SHOWN MAY VARY PER ACTUAL SITE CONDITIONS IN THE FIELD. THE NUMBER OF EXTERIOR TREADS AND RISERS AT CARAC TERRACES, PORCHES, DECKS, ETC. ARE TO BE DETERMINED BY THE BUILDER / CONTRACTOR ACCORDING TO ACTUAL GRADES.

|                       |                    |
|-----------------------|--------------------|
| <b>TITLE</b>          | <b>JOB #</b>       |
| 1277                  | 16172              |
| <b>DATE</b>           | <b>REVISED</b>     |
| 9/12/16               |                    |
| <b>SQUARE FOOTAGE</b> |                    |
| 2,576 Square Feet     |                    |
| <b>LOT #</b>          | <b>SUBDIVISION</b> |
|                       | Nestle Down Farms  |

**PROJECT**

# Custom Home for

## JIM CHAPMAN Communities

### Brighton "A" "2-Car Garage"

# CLASSICAL CONCEPTS ATLANTA

P.O. BOX 492873  
LAWRENCEVILLE, GA. 30049

(404) 226-6954      404.401-7298  
[DAVID]                  [MARY]

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MFTZDORAN@aOL.COM

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The responsibility of the purchaser or owner pertains for following listed conditions:  
Builder is neither responsible nor shall **CLASSICAL** give or receiving such  
warranty.  
Owner must notify architect upon all field changes, even after the time when the  
plans have been received.  
Architect is not liable regarding aspects that are reported about actual  
conditions.

Not to be utilized in building without permission. Only a signed permit  
may authorize a structural report and other alterations. Minor changes  
must be made from approved plans or drawings at existing site.

|                |                |
|----------------|----------------|
| <b>DRAWING</b> | <b>SHEET #</b> |
| MKH            | D1 of 6        |

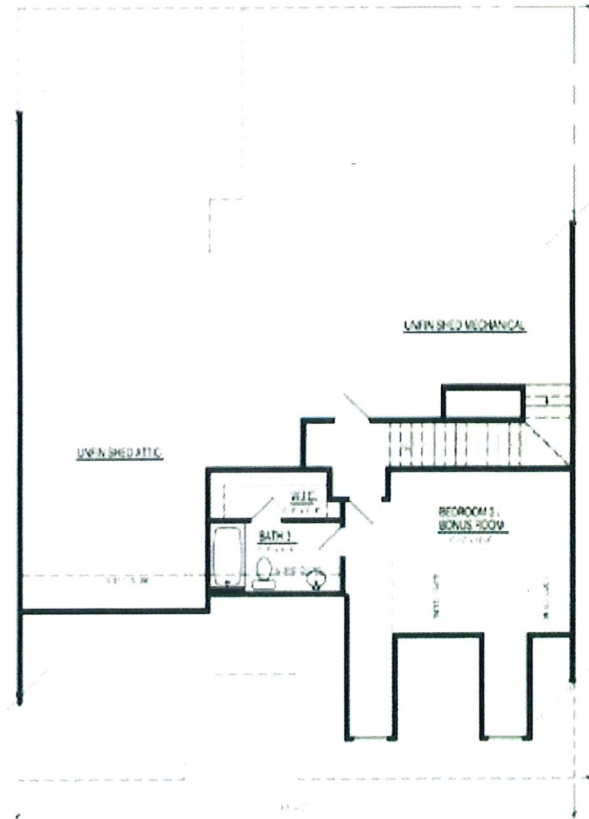
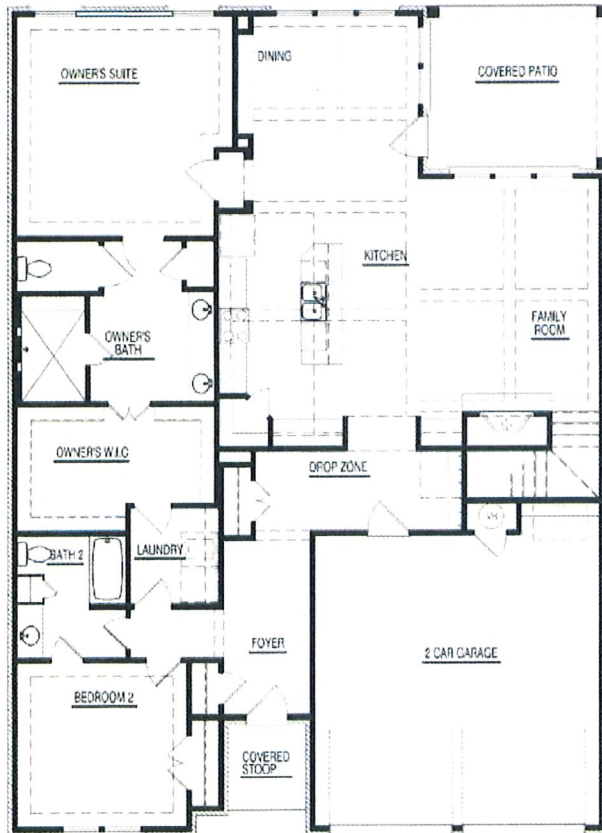
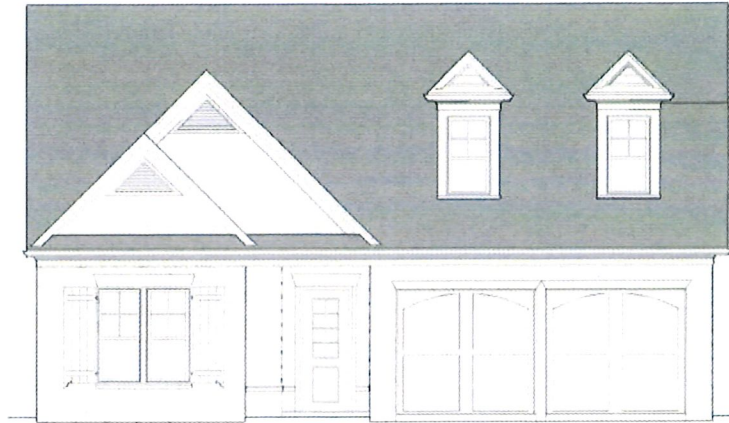
FRONT & REAR ELEV.'S

# THE OVERLOOK

## AT OLD ATLANTA

### Attached Villas

**Hanover A Plan**  
2,339 Square Feet



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Due to the evolutionary nature of our design improvement process, there may be actual versus design variations in room dimensions, door swings and window and door locations. These floor plans and any dimensions and square footages shown herein are only approximations. Any homeowner who is concerned about any representations regarding the floor plans should do his or her own investigation as to the dimensions, measurements and square footage of his/her home. We reserve the right to substitute materials of comparable quality. These plans are the sole and absolute property of Jim Chapman Communities, Inc. Use or copying of these plans, without the express written consent of Jim Chapman Communities, Inc., is illegal. Revised 3/31/2016

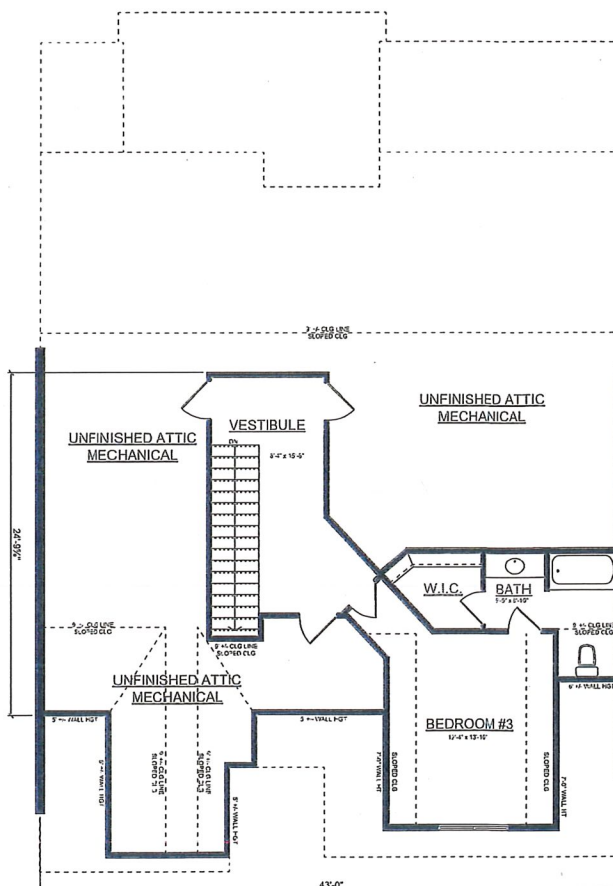
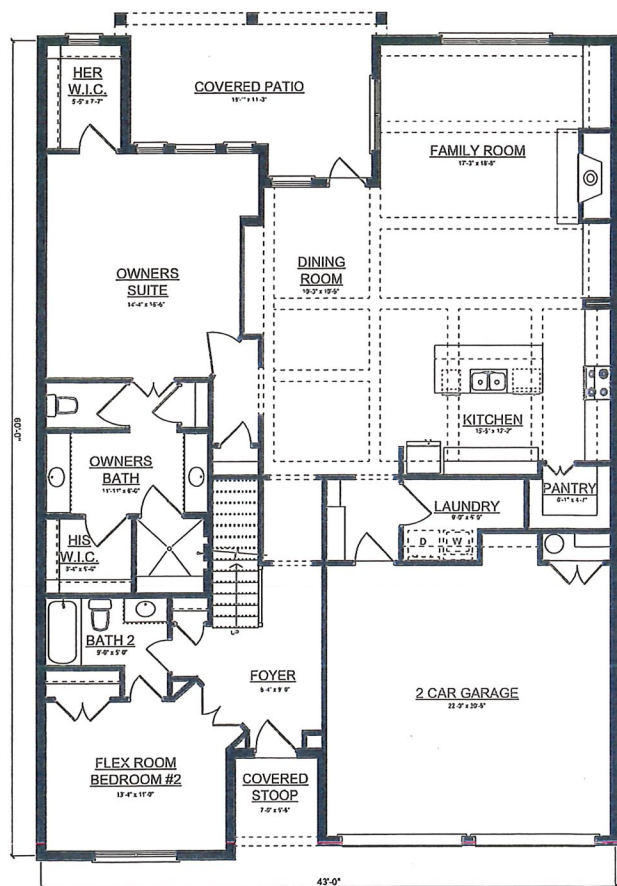
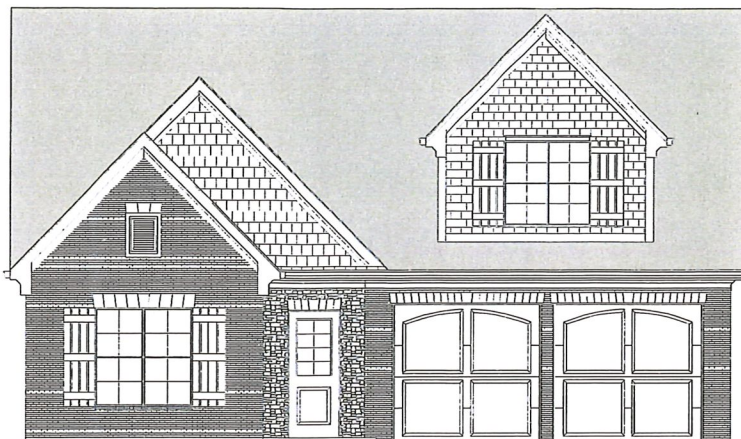


# THE OVERLOOK

## AT OLD ATLANTA

### Attached Villas

*Avery Plan*  
2,305 Square Feet



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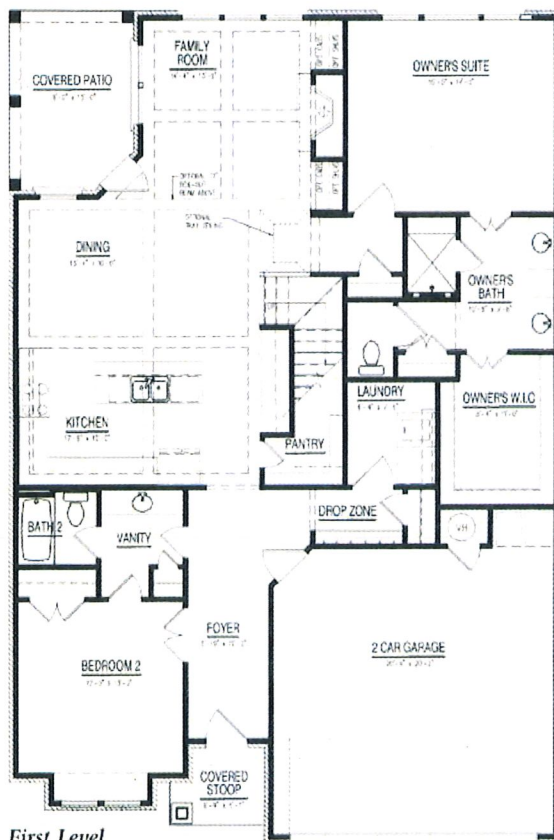
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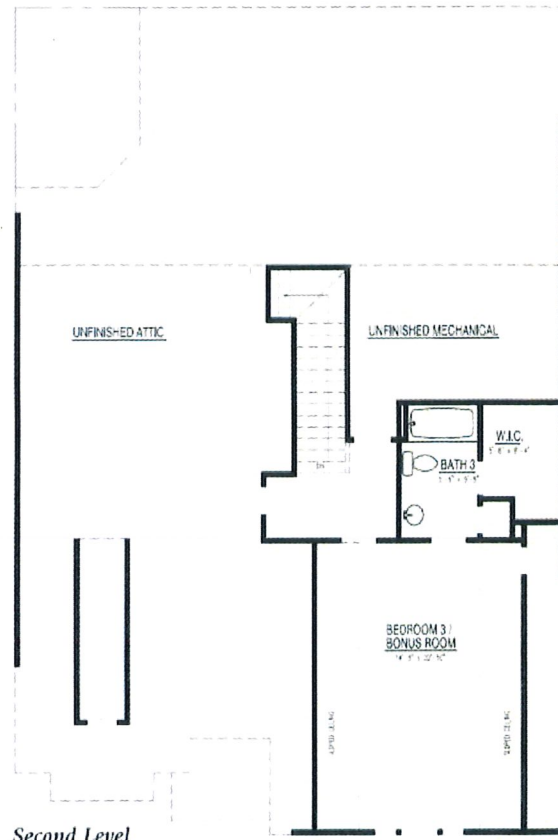
# THE OVERLOOK AT OLD ATLANTA

## Attached Villas

**Dalton Plan**  
2,270 Square Feet



First Level



Second Level

Due to the evolutionary nature of our design improvement process, there may be actual versus design variations in room dimensions, door swings and window and door locations. These floor plans and any dimensions and square footages shown herein are only approximations. Any homeowner who is concerned about any representations regarding the floor plans should do his or her own investigation as to the dimensions, measurements and square footage of his/her home. We reserve the right to substitute materials of comparable quality. These plans are the sole and absolute property of Jim Chapman Communities, Inc. Use or copying of these plans, without the express written consent of Jim Chapman Communities, Inc., is illegal. Revised 3/31/2016



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## **Traffic Impact Study**

### **Proposed Lanier Tract Multi-Use Development City of Gainesville, Georgia**

revised April 7, 2017  
for 3/31/2017 site plan

**MARC R. ACAMPORA, PE, LLC**  
**TRAFFIC ENGINEERING**



**Traffic Impact Study**

**Proposed Lanier Tract Multi-Use Development**  
**City of Gainesville, Georgia**

study prepared for:

Oak Hall Companies, LLC  
5256 Peachtree Road, Suite 195  
Atlanta, Georgia 30341

revised April 7, 2017  
for 3/31/2017 site plan



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## Summary

The Lanier Tract DRI is a primarily senior-age-restricted residential community that will be developed along Ahaluna Drive and Strickland Drive. There will be an office/retail node along GA 53, north of Avonlea Way. A fire station of 10,650 square feet is also proposed to be constructed along GA 53. Vehicular access will be provided at several locations, primarily along Ahaluna Drive, with connections to GA 53 via Strickland Drive, at the median opening at Avonlea Way, and through adjacent outparcels, aligning with Canterbury Road. The office/retail node will have a two right-in / right-out accesses directly on GA 53, with no anticipated internal connection to the balance of the development.

The project will generate 171 new trips in the a.m. peak hour, 251 new trips in the p.m. peak hour, and 3,097 new trips during a 24-hour weekday.

The following recommendations are made at each study intersection:

1. **Sportsman Club Road at Strickland Drive** – No changes are recommended at this intersection for the Existing, No-Build, or Future Phase One and Future Phase Two conditions.
2. **Dawsonville Highway at Sportsman Club Road** – The side street delays at this intersection are significant but the low side street volumes make the intersection a weak candidate for signalization. A northbound exclusive right turn lane should be added on GA 53 at Sportsman Club Road.
3. **Dawsonville Highway at Avonlea Way** – Side street delays are high at the existing eastbound approach of Avonlea Way. The volumes exiting the new Lanier Tract access will be low and many of them will be right turners. Therefore, this intersection is a weak candidate for signalization. A northbound right turn lane on GA 53 should be considered at this access and the site plan includes this lane. The new site access should be constructed with one entering lane and one exiting lane. The side street approach exiting the site should be controlled by side street stop sign and accompanying stop bar.
4. **Dawsonville Highway at Canterbury Road** – Side street delays are high on the existing eastbound approach of Canterbury Road. This intersection is a weak candidates for signalization in the existing, no-build, and Future Phase One conditions. No decel lane will be required for Future Phase One. With the future development of the retail outparcels, by others, a northbound deceleration lane on GA 53 is recommended. This intersection will be a prime candidate for signalization upon development of the outparcels. A signal warrant study should be performed for this intersection according to the standards set forth in the Federal Highway Administration's *Manual On Uniform Traffic Control Devices* (MUTCD). This new access at the Canterbury Road median break should be constructed with at least one entering lane and an exiting shared left/through lane and an exclusive right turn lane. The two westbound lanes are in anticipation of the development of the outparcels. With only the Lanier Tract volumes, only one entering and one exiting lane would be required. Until signalization is warranted, the side street approach exiting the outparcel tracts should be controlled by side street stop sign and accompanying stop bar.



5. **Dawsonville Highway at Ahaluna Drive** – A northbound right turn lane should be added on GA 53 at Ahaluna Drive in the existing condition. The future volumes exiting Ahaluna Drive would benefit from the addition of a second westbound lane, resulting in a shared left/through lane and an exclusive right turn lane on Ahaluna Drive at GA 53. There may be an opportunity to shorten the cycle length, which would reduce time spent by vehicles waiting on the side street.
6. **Dawsonville Highway at North Lake Square Access** – This intersection operates acceptably in all analysis conditions. No mitigation is recommended for any analysis condition.
7. **Dawsonville Highway at Beachwood Boulevard** – No changes are recommended at this intersection based on this study.
8. **Dawsonville Highway at McEver Road** – The existing southbound right turn volume is sufficiently-high (828 a.m., 481 p.m.) to merit consideration of the addition of a second exclusive right turn lane and/or the addition of a protected right turn overlap phase. There may be an opportunity to reduce the cycle length and fine-tune the signal timing at this intersection.
9. **Dawsonville Highway at Green Hill Circle** – This signalized intersection incurs high sides street delays, again, due to the allocation of the majority of greentime to the Dawsonville Highway approaches. There may be an opportunity to reduce the cycle length and fine-tune the signal timing at this intersection.
10. **Dawsonville Highway at Shallowford Road** – The lane configuration and signal phasing are appropriate for this intersection. Reduction of the cycle length and optimization of the allocation of greentime could reduce delays and queuing at this intersection.

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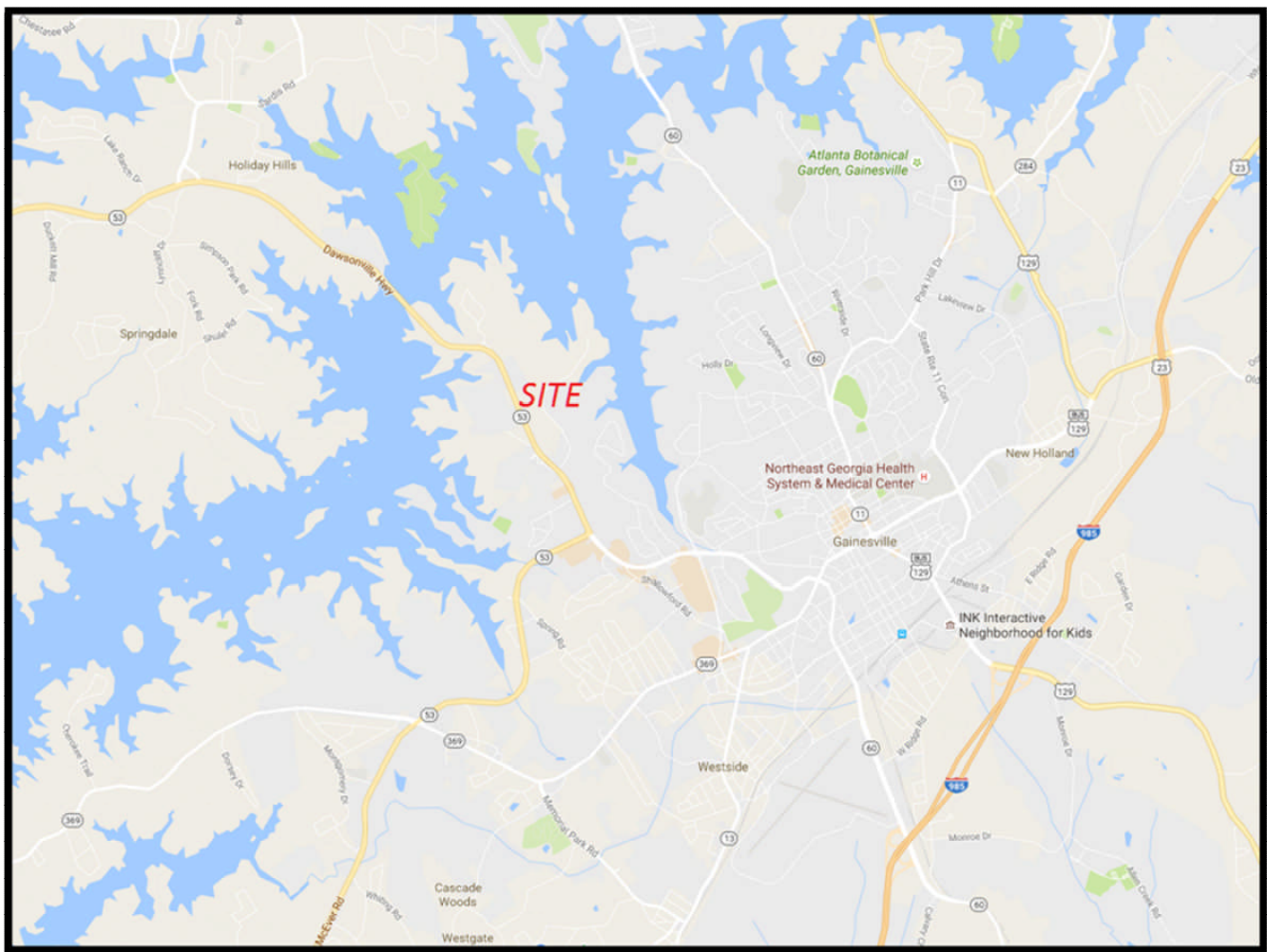
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## Introduction

This study assesses the traffic impact of a proposed multi-use Development of Regional Impact (DRI) in the City of Gainesville, Georgia. The site is located along the east side of Dawsonville Highway (Georgia State Route 53), and the east and west sides of Ahaluna Drive, as shown in the location map in Figure 1. The project will include a mix of senior living facilities, including senior-age-restricted single family homes, cottages, terrace homes, independent living apartments, and assisted living. In addition, the project will include a retail and office tract. This impact study includes the adjacent Willow Springs townhome development, to the north, and seven retail outparcels to be developed by others, located along the east side of GA 53.

The purpose of this traffic impact study is to determine existing traffic operating conditions in the vicinity of the proposed development, project future “no-build” and “build” traffic volumes, assess the impact of the subject development, then develop conclusions and recommendations to mitigate the project traffic impact and ensure safe and efficient existing and future traffic conditions in the vicinity of the project.



**Figure 1 – Lanier Tract Location Map**

## Existing Traffic Conditions

Existing traffic operating conditions in the vicinity of the proposed Lanier Tract development were assessed. The following is a description of existing facilities, volumes, and intersection operations.

### Description of Roadway Facilities

Georgia State Route 53 (Dawsonville Highway adjacent to the site) is a northwest to southeast principal arterial that extends from northwest Georgia, crosses US 19 and Lake Lanier, then passes the subject site and continues to the southeast. The State Route 53 designation turns to the southwest and continues along McEver Road to Mundy Mill Road, then follows Mundy Mill Road through its interchange with Interstate 985, and continues to the southeast. Adjacent to the subject development, GA 53 has two through travel lanes in each direction, is divided with a grassed median, and has exclusive turn lanes at major intersections. The terrain along this section of GA 53 is gently rolling and the posted speed limit is 45 mph.

Ahaluna Drive is a two lane rural local roadway that begins at a signalized intersection at GA 53 and winds through undeveloped land and low density residential development, to its terminus near the shore of Lake Lanier. The road is gently winding with rolling terrain. The proposed Lanier Tract development will develop some of the land on both sides of Ahaluna Drive, and the signal at GA 53 will provide one of the primary access points for this development to the roadway system.

Strickland Drive and Sportsman Club Road are two-lane residential streets that will provide access for the northern part of the proposed Lanier Tract DRI to GA 53. Strickland Drive is side street stop sign controlled at Sportsman Club Road and Sportsman Club Road is side street stop sign controlled at a median break on GA 53. Both roads are gently winding with gently rolling terrain and Strickland Drive becomes unpaved at its eastern terminus. The intersection of Sportsman Club Road at Strickland Drive is located in very close proximity to the intersection of Sportsman Club Road and Old Dawsonville Highway. However, lines of sight between the two intersections are clear and the volumes at these two locations are very low.

The following are photographs of intersections and roadways in the study area.





**Photograph 1 – Sportsman Club Road Facing Strickland Drive From Old Dawsonville Highway**



**Photograph 2 – View From Sportsman Club Road Facing North Along GA 53**



Photograph 3 – View From Avonlea Way Facing North Along GA 53



Photograph 4 – GA 53 Facing North at Ahaluna Drive





**Photograph 5 – Ahaluna Drive Facing West with Retail Access to Left, SR 53 Ahead**



**Photograph 6 – Typical Section Along Ahaluna Drive**



**Photograph 7 – View From Beechwood Drive Facing Under-Construction Retail Across GA 53**



**Photograph 8 – Eastbound McEver Road at Dawsonville Highway**





**Photograph 9 – Northbound Dawsonville Highway at Shallowford Road**

### Existing Traffic Volumes

The City of Gainesville’s Unified Land Development Code (ULDC) specifies that the study area to be included in a traffic impact study will be determined by calculating the peak hour and daily trips that the project will generate, then applying the table provided in the code, shown as Table 1, below, to determine the distance from the project that must be included in the study area.

**Table 1 – ULDC Study Area Size Requirements**

| Peak Hour Trips Generated | Daily Trips Generated | Distance from Perimeter of Proposed Development Along Roads |
|---------------------------|-----------------------|-------------------------------------------------------------|
| 100 - 150                 | 1,000 – 1,500         | ½ mile                                                      |
| 151 - 500                 | 1,501 – 5,000         | 1 mile                                                      |
| 501 – 1,000               | 5,001 – 10,000        | 2 miles                                                     |
| 1001 or more              | 10,001 or more        | 3 miles                                                     |

from the City of Gainesville ULDC

The trip generation for the proposed development is presented later in this report, summarized in Table 6. The peak hour trip generation for the project was calculated at 251 trips and the 24-hour volume is 3,097 trips. Based on these numbers, applied to the ULDC standard presented above, the study network was determined to

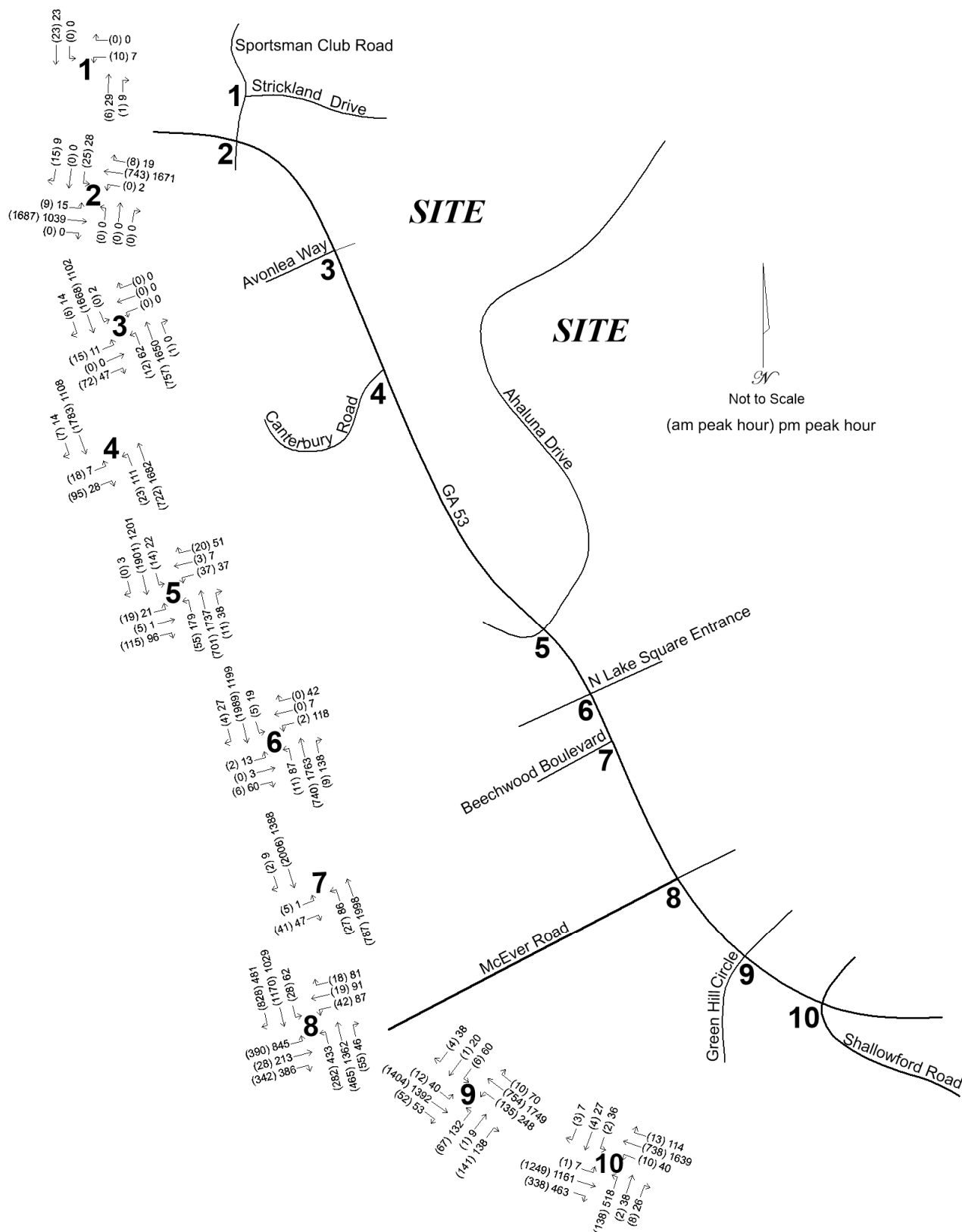


extend for one mile from the limits of the proposed site. The one mile limits were presented to the City and, based on that information, the intersections to be included in this study were agreed upon with the City as follows:

1. Sportsman Club Road at Strickland Drive
2. Dawsonville Highway at Sportsman Club Road
3. Dawsonville Highway at Avonlea Way
4. Dawsonville Highway at Canterbury Road
5. Dawsonville Highway at Ahaluna Drive
6. Dawsonville Highway at North Lake Square Shopping Center Entrance
7. Dawsonville Highway at Beachwood Boulevard
8. Dawsonville Highway at McEver Road
9. Dawsonville Highway at Green Hill Circle
10. Dawsonville Highway at Shallowford Road

Existing full turning movement traffic volume counts were collected at each of these intersections. The counts at most intersections were collected on Thursday, November 17, 2016, from 7:00 a.m. to 9:00 a.m. and from 4:30 p.m. to 6:30 p.m. The counts at the North Lake Square entrance were collected on Wednesday, March 22, 2017. Area schools were in standard session on the dates of the traffic counts. From the count data, the highest four consecutive 15-minute interval volumes at each intersection, during each time period, were determined. These volumes make up the typical weekday a.m. and p.m. peak hour traffic volumes at that intersection. The existing a.m. and p.m. peak hour turning movement volumes are shown in Figure 2. The intersection raw count data is found in Appendix A. It is noted that these existing volumes were compared with the volumes in the Preliminary Timing Report, SR 53 Connector – SR 60, Hall County, Georgia, dated April 2016, as provided by the City of Gainesville's traffic consultant. The magnitude of the side street volumes were found to be very comparable with the counts performed for this current study, and generally slightly higher. However, the volumes on the major streets were consistently notably higher for this current study.

Historic Georgia DOT 24-hour traffic counts were also collected in the vicinity. These counts are summarized in Table 3 in the No-Build Conditions section of this report. The 2015 (the latest year for which Georgia DOT data is available) Georgia DOT Average Annual Daily Traffic (AADT) volume on SR 53 north of Sportsman Club Road was 25,600 vehicles per day (vpd).



### Figure 2 – Existing Traffic Volumes

## Existing Intersection Operations

Existing traffic operations were analyzed at the counted intersections using Synchro software, version 8, in accordance with the methodology presented in the Transportation Research Board's 2010 *Highway Capacity Manual (HCM 2010)*. The *HCM 2010* methodology is presented in Appendix B. The results of the analysis are shown in Table 2. Computer printouts containing detailed results of the analysis are located in Appendix C.

**Table 2 – Existing Intersection Operations**

| Intersection / Approach                       | A.M. Peak Hour |              | P.M. Peak Hour |              |
|-----------------------------------------------|----------------|--------------|----------------|--------------|
|                                               | LOS            | Delay s/veh  | LOS            | Delay s/veh  |
| 1. Sportsman Club Road at Strickland Drive    | A              | 2.6          | A              | 1.6          |
| southbound left turn                          | A              | 0.0          | A              | 0.0          |
| westbound approach                            | A              | 8.8          | A              | 8.9          |
| 2. Dawsonville Highway at Sportsman Club Road | A              | 5.3          | C              | 17.3         |
| northbound approach (turn lane)               | A              | 0.0          | A              | 0.0          |
| southbound approach (Sportsman Club Road)     | <b>F</b>       | <b>224.6</b> | <b>F</b>       | <b>901.3</b> |
| eastbound left turn (GA 53)                   | A              | 9.7          | C              | 15.7         |
| westbound left turn (GA 53)                   | A              | 0.0          | B              | 10.7         |
| 3. Dawsonville Highway at Avonlea Way         | A              | 2.5          | A              | 1.2          |
| northbound left turn (GA 53)                  | C              | 17.6         | B              | 11.4         |
| eastbound left turn                           | <b>F</b>       | <b>275.4</b> | <b>F</b>       | <b>144.1</b> |
| eastbound right turn                          | D              | 26.4         | B              | 13.7         |
| 4. Dawsonville Highway at Canterbury Road     | A              | 3.8          | A              | 1.2          |
| northbound left turn (GA 53)                  | C              | 18.5         | B              | 12.4         |
| eastbound left turn                           | <b>F</b>       | <b>363.9</b> | <b>F</b>       | <b>183.8</b> |
| eastbound right turn                          | D              | 30.1         | B              | 13.5         |
| 5. Dawsonville Highway at Ahaluna Drive       | B              | 16.5         | B              | 12.7         |
| northbound approach (GA 53)                   | A              | 4.6          | A              | 8.6          |
| southbound approach (GA 53)                   | B              | 15.9         | B              | 10.4         |
| eastbound approach                            | D              | 43.6         | C              | 26.1         |
| westbound approach                            | <b>F</b>       | <b>127.8</b> | <b>F</b>       | <b>97.4</b>  |
| 6. Dawsonville Highway at North Lake Square   | A              | 1.7          | B              | 14.8         |
| northbound approach (GA 53)                   | A              | 0.8          | B              | 12.9         |
| southbound approach (GA 53)                   | A              | 1.8          | A              | 8.7          |
| eastbound approach                            | E              | 69.5         | C              | 22.9         |
| westbound approach                            | E              | 70.0         | E              | 68.3         |
| 7. Dawsonville Highway at Beachwood Boulevard | A              | 1.4          | A              | 0.7          |
| northbound left turn (GA 53)                  | C              | 23.0         | B              | 14.0         |
| eastbound left turn                           | <b>F</b>       | <b>393.1</b> | <b>F</b>       | <b>235.1</b> |
| eastbound right turn                          | D              | 28.6         | C              | 16.4         |
| 8. Dawsonville Highway at McEver Road         | D              | 37.1         | <b>F</b>       | <b>98.0</b>  |
| northbound approach (GA 53)                   | E              | 57.3         | <b>F</b>       | <b>105.0</b> |
| southbound approach (GA 53)                   | B              | 17.1         | D              | 54.2         |

|                                             |   |      |          |              |
|---------------------------------------------|---|------|----------|--------------|
| eastbound approach                          | E | 68.5 | <b>F</b> | <b>145.0</b> |
| westbound approach                          | E | 60.1 | E        | 67.2         |
| 9. Dawsonville Highway at Green Hill Circle | B | 11.6 | D        | 40.7         |
| northbound approach (GA 53)                 | A | 6.2  | C        | 31.6         |
| southbound approach (GA 53)                 | B | 10.9 | D        | 48.1         |
| eastbound approach                          | D | 39.5 | E        | 56.2         |
| westbound approach                          | D | 38.1 | E        | 61.3         |
| 10. Dawsonville Highway at Shallowford Road | B | 10.6 | D        | 48.6         |
| northbound approach (GA 53)                 | A | 5.5  | C        | 32.7         |
| southbound approach (GA 53)                 | A | 6.2  | D        | 50.7         |
| eastbound approach                          | E | 75.9 | <b>F</b> | <b>86.2</b>  |
| westbound approach                          | D | 49.9 | E        | 78.0         |

The analysis of the existing conditions reveals generally acceptable traffic operations at the study intersections. However, Dawsonville Highway, McEver Road, and Shallowford Road carry significant through traffic. At unsignalized intersections, the heavy major roadway volumes contribute to high side street delays. At signalized intersections, the side street delays are also high, even at locations with moderate side street volumes, due to the heavy greentime demands placed on the signals by the major street volumes. The existing conditions at each intersection are discussed briefly as follows:

1. **Sportsman Club Road at Strickland Drive** – Operations at this intersection are excellent due to extremely low volumes. This intersection is located very close to the stop sign controlled intersection of Sportsman Club Road at Old Dawsonville Highway. However, the volumes at that intersection are extremely low, also, and the lines of sight between the two intersections are clear. Therefore, no changes are recommended at this intersection for the existing condition.
2. **Dawsonville Highway at Sportsman Club Road** – The overall operations at this intersection are good, but the Sportsman Club Road southbound approach operates with high delays. This is not unusual for side street stop sign controlled approaches at major thoroughfares such as GA 53, and the volumes incurring the high delays are low. The only way to achieve side street delays better than LOS F is to signalize this intersection. However, signalization would introduce new delays to GA 53 and could also increase the potential for rear-end collisions on GA 53. Signalization would require satisfaction of applicable warrants, as proscribed in the Federal Highway Administration's *Manual On Uniform Traffic Control Devices* (MUTCD). While a warrant analysis was not performed as part of this traffic impact study, the low side street volumes make this intersection a weak candidate for signalization in the existing condition. A review of Georgia DOT auxiliary lane standards is provided later in this report, which concludes that a northwest-bound exclusive right turn lane is likely to be justified, based on existing volumes, on GA 53 at Sportsman Club Road.
3. **Dawsonville Highway at Avonlea Way, 4. Dawsonville Highway at Canterbury Road, and 7. Dawsonville Highway at Beachwood Boulevard** – The operations at these three unsignalized intersections are comparable with one another, with the GA 53 approaches operating well, moderate delays for the side

street right turn movements, and high delays for the side street left turn movements. These side street left turn delays are high for the same explanation just provided for Sportsman Club Road. As with that intersection, signalization would be required at these three intersections, in order to reduce the side street left turn delays to better than LOS F. At all three of these intersections, the side street approach volumes are predominately right turners, with extremely low left turn volumes. For this reason, these three intersections are considered unlikely candidates for signalization in the existing condition. No signal warrant analyses were performed at these intersections as part of this traffic study.

5. **Dawsonville Highway at Ahaluna Drive** – While this intersection is signalized, the greentime on the signal heavily favors the GA 53 approaches. This is appropriate given the volume disparity between the GA 53 approaches and the significantly-lower-volume side street approaches. This results in high side street delays, particularly on the westbound approach exiting Ahaluna Drive. A second westbound lane, striped as an exclusive right turn lane, would allow the signal to process more side street traffic with its limited greentime allocation. In addition, this second lane would allow for more right-turns-on-red which are currently trapped behind left and through trips. The addition of this right turn lane would require relocation of the steel strain pole for the signal, a drainage structure, and possibly a large brick monument sign, which could reduce the feasibility of adding this lane. Field observations suggest that there may be an opportunity to shorten the cycle length, which would reduce time spent by vehicles waiting for the side street green signal. A review of Georgia DOT auxiliary lane standards is provided later in this report, which concludes that a northbound exclusive right turn lane should be constructed on GA 53 at Ahaluna Drive in the existing condition. The addition of the second westbound lane on Ahaluna Drive and the northbound exclusive right turn lane on GA 53 will improve operations, but the Ahaluna Drive approach will still operate at LOS F in the a.m. peak hour due to the long cycle length with the greentime heavily favoring GA 53.
6. **Dawsonville Highway at North Lake Square Access** – This intersection operates well in both peak time periods. In the a.m., the side street approach volumes are extremely low, attributed to most or all of the retail on the side street approaches being closed for business at that time. The side street volumes increase notably in the p.m. Side street approach delays are fairly high, though still within acceptable limits. This is attributed to the allocation of the majority of greentime on the signal to the Dawsonville Highway approaches, resulting in long waits on the side streets, even when volumes are low.
8. **Dawsonville Highway at McEver Road** – This is the major intersection in the area, where the route of GA 53 turns from Dawsonville Highway to McEver Road. The lane configuration and signal phasing at this intersection are generally appropriate. The southbound right turn volume is sufficiently-high (828 a.m., 481 p.m.) to merit consideration of the addition of a second exclusive right turn lane and/or the addition of a protected right turn overlap phase. The overlap phase would provide a protected right turn arrow that would operate concurrently with the westbound left turn protected phase on the McEver Road approach. This would replace the red ball indication for that movement which would increase capacity by not requiring each right turner to stop. However, even with these improvements, the intersection will still operate at LOS F in the p.m. peak hour. Finally, there may be an opportunity to reduce the cycle length and fine-tune the signal timing at this intersection.



9. **Dawsonville Highway at Green Hill Circle** – This signalized intersection generally operates acceptably, but does incur some side-street delays, again, due to the allocation of the majority of greentime to the Dawsonville Highway approaches. There may be an opportunity to reduce the cycle length and fine-tune the signal timing at this intersection.
10. **Dawsonville Highway at Shallowford Road** – The lane configuration and signal phasing are appropriate for this intersection. Reduction of the cycle length and optimization of the allocation of greentime could reduce delays and queuing at this intersection.

## Future No-Build Traffic Conditions

A future no-build condition was developed. This represents the traffic conditions that will exist in the future at the date of the full build-out of the proposed Lanier DRI, but not including the Lanier DRI trips. The purpose of the no-build analysis is to isolate the traffic impacts of the proposed development from other growth and development that is expected to occur in the area while the Lanier DRI is under construction.

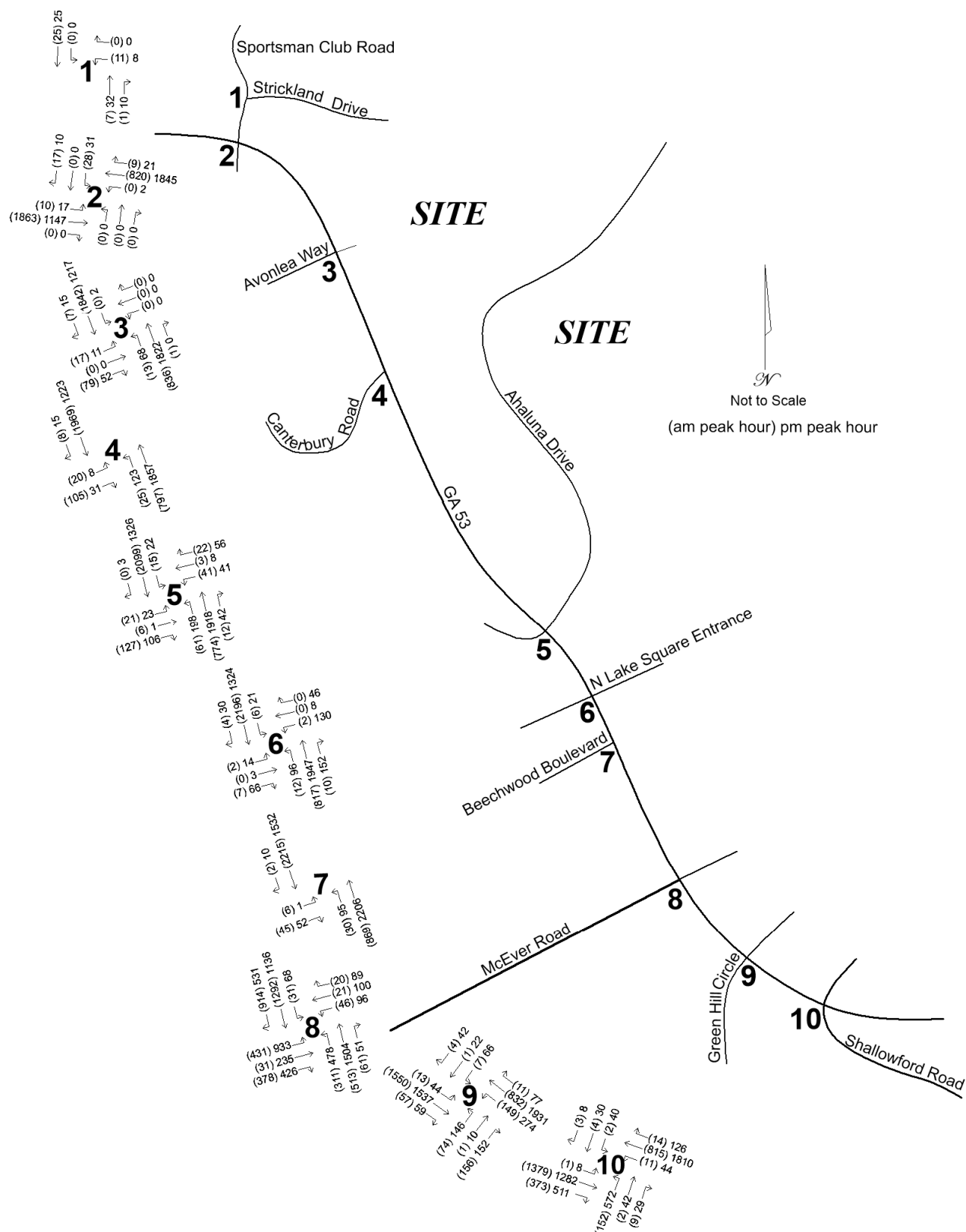
The no-build condition consists of the counted traffic volumes, increased by a general background growth factor. In order to develop the background growth factor, historic Georgia DOT 24-hour traffic counts were collected in the vicinity of the Lanier DRI. These counts were performed from 2011 through 2015 (the latest year for which Georgia DOT data is available) and, according to the Georgia DOT, the counts were adjusted for a variety of factors, including season, in order to arrive at the Average Annual Daily Traffic (AADT) volume. The Georgia DOT AADT counts are summarized in Table 3.

**Table 3 – Georgia DOT Daily Traffic Volume Counts**

| Year              | SR 53<br>N of<br>Sportsman | Annual<br>Growth | McEver<br>W of<br>SR 53 | Annual<br>Growth | Dawsonville<br>S of<br>Shallowford | Annual<br>Growth | Shallowford<br>S of<br>Dawsonville | Annual<br>Growth |
|-------------------|----------------------------|------------------|-------------------------|------------------|------------------------------------|------------------|------------------------------------|------------------|
| <b>Station ID</b> | <b>1390269</b>             |                  | <b>1390274</b>          |                  | <b>1390258</b>                     |                  | <b>1390647</b>                     |                  |
| 2011              | 23,830                     | na               | 21,520                  | na               | 25,950                             | na               | 8,280                              | na               |
| 2012              | 23,520                     | -1.3%            | 21,150                  | -1.7%            | 25,610                             | -1.3%            | 8,140                              | -1.7%            |
| 2013              | 22,730                     | -3.4%            | 20,890                  | -1.2%            | 25,520                             | -0.4%            | 8,090                              | -0.6%            |
| 2014              | 22,700                     | -0.1%            | 20,900                  | 0.0%             | 25,500                             | -0.1%            | 13,300                             | 64.4%            |
| 2015              | 25,600                     | 12.8%            | 21,600                  | 3.3%             | 26,300                             | 3.1%             | 13,700                             | 3.0%             |
| Annual<br>Average |                            | 1.8%             |                         | 0.1%             |                                    | 0.3%             |                                    | 13.4%            |

The annual growth trend has fluctuated from year to year, with generally negative growth during the first few count years, then strong growth in the most recent years. The average annual growth on GA 53 closest to the site has been 1.8%. A modest 2% annual growth factor was applied to the counted volumes when projecting the future no-build volumes. The growth was applied for five years, for a total of 10.4% growth, that will occur while the Lanier Tract DRI is under construction.

The existing, counted traffic volumes were increased by the 10.4% growth factor. The results are the no-build condition traffic volumes that will be on the roadway network in the future when the Lanier Tract DRI is completed, but excluding the Lanier Tract DRI trips. These no-build volumes are shown in Figure 3.



### Figure 3 – Future No-Build Traffic Volumes

## Future No-Build Intersection Operations

No-build traffic operations were analyzed at the counted intersections using Synchro software, version 8, in accordance with the methodology presented in the Transportation Research Board's 2010 *Highway Capacity Manual (HCM 2010)*. The *HCM 2010* methodology is presented in Appendix B. The results of the analysis are shown in Table 4. Computer printouts containing detailed results of the analysis are located in Appendix D.

**Table 4 – Future No-Build Intersection Operations**

| Intersection / Approach                       | A.M. Peak Hour |              | P.M. Peak Hour |                |
|-----------------------------------------------|----------------|--------------|----------------|----------------|
|                                               | LOS            | Delay s/veh  | LOS            | Delay s/veh    |
| 1. Sportsman Club Road at Strickland Drive    | A              | 2.6          | A              | 1.7            |
| southbound left turn                          | A              | 0.0          | A              | 0.0            |
| westbound approach                            | A              | 8.9          | A              | 8.9            |
| 2. Dawsonville Highway at Sportsman Club Road | B              | 11.8         | D              | 34.3           |
| northbound approach (turn lane)               | A              | 0.0          | A              | 0.0            |
| southbound approach (Sportsman Club Road)     | <b>F</b>       | <b>496.6</b> | <b>F</b>       | <b>1,780.7</b> |
| eastbound left turn (GA 53)                   | B              | 10.3         | C              | 17.9           |
| westbound left turn (GA 53)                   | A              | 0.0          | B              | 11.3           |
| 3. Dawsonville Highway at Avonlea Way         | A              | 4.5          | A              | 1.5            |
| northbound left turn (GA 53)                  | C              | 20.4         | B              | 12.2           |
| eastbound left turn                           | <b>F</b>       | <b>552.3</b> | <b>F</b>       | <b>229.1</b>   |
| eastbound right turn                          | D              | 33.7         | B              | 14.7           |
| 4. Dawsonville Highway at Canterbury Road     | A              | 6.7          | A              | 1.7            |
| northbound left turn (GA 53)                  | C              | 21.7         | B              | 13.7           |
| eastbound left turn                           | <b>F</b>       | <b>715.5</b> | <b>F</b>       | <b>349.9</b>   |
| eastbound right turn                          | E              | 41.5         | B              | 14.4           |
| 5. Dawsonville Highway at Ahaluna Drive       | C              | 22.3         | B              | 15.5           |
| northbound approach (GA 53)                   | A              | 5.6          | B              | 11.5           |
| southbound approach (GA 53)                   | C              | 22.7         | B              | 14.0           |
| eastbound approach                            | E              | 58.3         | C              | 23.8           |
| westbound approach                            | <b>F</b>       | <b>139.1</b> | <b>F</b>       | <b>96.6</b>    |
| 6. Dawsonville Highway at North Lake Square   | A              | 3.2          | B              | 16.6           |
| northbound approach (GA 53)                   | A              | 1.0          | B              | 14.8           |
| southbound approach (GA 53)                   | A              | 3.9          | B              | 10.7           |
| eastbound approach                            | E              | 69.5         | C              | 21.8           |
| westbound approach                            | E              | 70.0         | E              | 68.1           |
| 7. Dawsonville Highway at Beachwood Boulevard | A              | 2.6          | A              | 0.9            |
| northbound left turn (GA 53)                  | D              | 28.6         | C              | 15.8           |
| eastbound left turn                           | <b>F</b>       | <b>866.6</b> | <b>F</b>       | <b>375.6</b>   |
| eastbound right turn                          | E              | 36.2         | C              | 18.4           |
| 8. Dawsonville Highway at McEver Road         | D              | 45.7         | <b>F</b>       | <b>127.3</b>   |
| northbound approach (GA 53)                   | E              | 67.7         | <b>F</b>       | <b>135.0</b>   |

|                                             |          |             |          |              |
|---------------------------------------------|----------|-------------|----------|--------------|
| southbound approach (GA 53)                 | C        | 20.0        | E        | 57.9         |
| eastbound approach                          | <b>F</b> | <b>92.6</b> | <b>F</b> | <b>208.0</b> |
| westbound approach                          | E        | 61.8        | E        | 70.6         |
| 9. Dawsonville Highway at Green Hill Circle | B        | 14.2        | E        | 65.1         |
| northbound approach (GA 53)                 | A        | 8.2         | E        | 70.6         |
| southbound approach (GA 53)                 | B        | 13.5        | D        | 54.3         |
| eastbound approach                          | D        | 44.0        | E        | 58.1         |
| westbound approach                          | D        | 38.8        | <b>F</b> | <b>112.9</b> |
| 10. Dawsonville Highway at Shallowford Road | B        | 12.5        | E        | 73.1         |
| northbound approach (GA 53)                 | A        | 6.0         | E        | 72.0         |
| southbound approach (GA 53)                 | A        | 9.1         | E        | 57.5         |
| eastbound approach                          | E        | 76.3        | <b>F</b> | <b>119.5</b> |
| westbound approach                          | D        | 49.9        | E        | 77.7         |

The analysis of the no-build condition reveals increases in delays at each of the study intersections, as would be expected. The no-build analysis did not include any of the potential mitigation discussed in the existing analysis. The no-build condition at each intersection is discussed briefly as follows:

1. **Sportsman Club Road at Strickland Drive** – Operations at this intersection will continue to be excellent in the no-build condition. Therefore, no changes are recommended at this intersection for the no-build condition.
2. **Dawsonville Highway at Sportsman Club Road** – The side street delays will become very high in the no-build condition. However, the volumes incurring these delays will remain modest and it is considered unlikely that this intersection would be a good candidate for signalization.
3. **Dawsonville Highway at Avonlea Way, 4. Dawsonville Highway at Canterbury Road, and 7. Dawsonville Highway at Beachwood Boulevard** – The no-build operations at these three unsignalized intersections will be comparable to the existing condition, with the GA 53 approaches operating well, moderate delays for the side street right turn movements, and high delays for the side street left turn movements. As with the existing condition, at all three of these intersections, the side street volumes are predominately right turners, with extremely low left turn volumes. For this reason, these three intersections are expected to be unlikely candidates for signalization in the no-build condition.
5. **Dawsonville Highway at Ahaluna Drive** – The Ahaluna Drive approach will continue to operate at LOS F and the delays will increase. The mitigation discussed in the existing condition is still applicable.
6. **Dawsonville Highway at North Lake Square Access** – This intersection will operate comparably in the no-build condition, as in the existing condition. No mitigation is identified for this intersection in the no-build condition.
8. **Dawsonville Highway at McEver Road** – Operations will continue to be congested at this intersection. The mitigation discussed in the existing condition is still applicable.



9. **Dawsonville Highway at Green Hill Circle** – Delays will increase from the existing to no-build conditions. A.M. peak operations will continue to be acceptable, while the p.m. peak will teeter between LOS E and LOS F. No new mitigation is identified for the no-build condition.
10. **Dawsonville Highway at Shallowford Road** – As with the other intersections, no new mitigation is identified for the no-build condition. Delays will increase from the existing condition, but will generally remain acceptable in the a.m. and at the LOS E to LOS F threshold in the p.m.

## Lanier Tract Traffic Characteristics

This section describes the anticipated traffic characteristics of the proposed Lanier Tract development, including a site description, how much traffic the project will generate, and where that traffic will travel.

### Project Description

The Lanier Tract DRI is a primarily senior-age-restricted residential community that will be developed generally along Ahaluna Drive and Strickland Drive. There will be an office/retail node along GA 53, north of Avonlea Way. A fire station of 10,650 square feet is also proposed to be constructed along GA 53 in conjunction with this development. Vehicular access will be provided at several locations, primarily along Ahaluna Drive, with connections to GA 53 via Strickland Drive, at the median opening at Avonlea Way, and through adjacent outparcels (which will be discussed in the Future Phase Two section of this report), aligning with Canterbury Road. The office/retail node will have a two right-in / right-out accesses directly on GA 53, with no anticipated internal connection to the balance of the development. The site plan is presented in Figure 4.

### Trip Generation

The volume of traffic that will be generated by the proposed Lanier Tract DRI was calculated using the equations and rates in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 9<sup>th</sup> Edition. The trip generation for all of the detached homes was calculated using ITE Land Use 251 – Senior Adult Housing – Detached. The trips for the independent living units were calculated using ITE Land Use 253 – Congregate Care Facility. The trips for the assisted living facility were determined using ITE Land Use – 254 – Assisted Living. The storage facility trips were calculated using ITE Land Use 151 – Mini-Warehouse. The office / retail trip generation was calculated by dividing the total square footage of that commercial node in half and applying ITE Land Use 820 – Shopping Center to half of the square footage and ITE Land Use 750 – Office Park to the other half.

No multi-use adjustment was applied to the raw trip generation to account for the mixed-use nature of the project, because the office/retail node is not connected internally with the balance of the project. The retail trip generation was adjusted to account for pass-by trips. Pass-by trips are trips to the retail that are currently driving on GA 53 and which will turn into the site for shopping purposes then continue on the trip they are already making. The ITE *Trip Generation Manual* provides an average p.m. peak hour pass-by percentage of 38% for the shopping center land use. However, the plan for this development, with the retail mixed with office, suggests that this retail may be highly destination-oriented. To be conservative, a 25% pass-by adjustment was made for the p.m. peak hour trips, while a 15% adjustment was applied to the a.m. peak hour and 24-hour volumes.

The fire station will be located on the GA 53 adjacent to the project and will serve not just this project, but also the surrounding community. The trips that will be generated by the fire station are expected to be very low. Therefore, the trip generation of the fire station was excluded from this calculation.

The trip generation calculations are shown in Table 5.

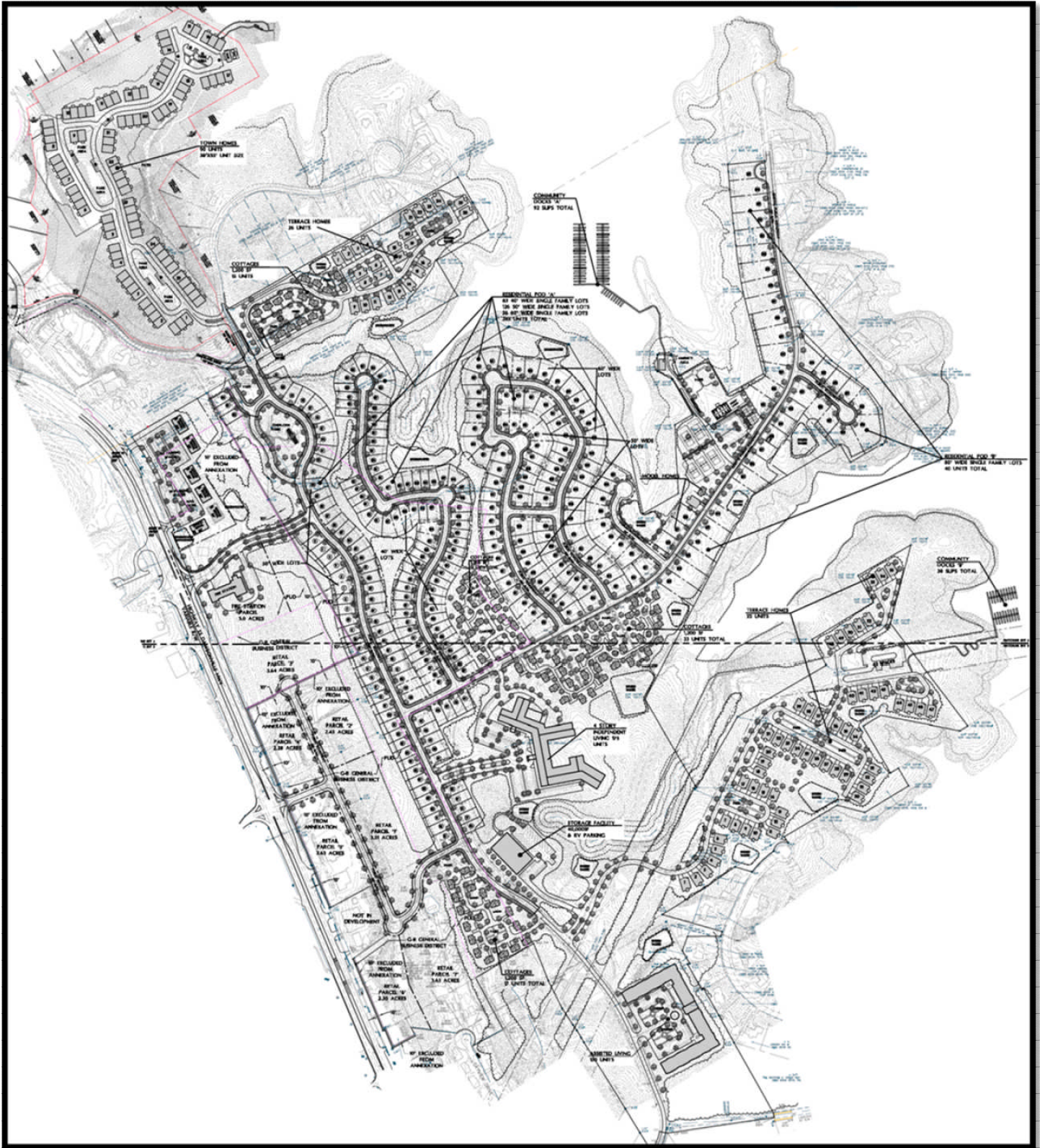


Figure 4 – Lanier Tract Site Plan

**Table 5 – Lanier Tract Trip Generation**

| Land Use                               | ITE Code | Size                   | A.M. Peak Hour |           |           | P.M. Peak Hour |           |            | 24-Hour    |
|----------------------------------------|----------|------------------------|----------------|-----------|-----------|----------------|-----------|------------|------------|
|                                        |          |                        | In             | Out       | Total     | In             | Out       | Total      | 2-Way      |
| Terrace Homes Detached (at Strickland) | 251      | 26 homes               | 2              | 4         | 6         | 4              | 3         | 7          | 96         |
| Cottages Detached (at Strickland)      | 251      | 15 homes               | 1              | 2         | 3         | 2              | 2         | 4          | 56         |
| Pod A Single Family Detached           | 251      | 265 homes              | 20             | 38        | 58        | 44             | 28        | 72         | 976        |
| Pod B Single Family Detached           | 251      | 40 homes               | 3              | 6         | 9         | 6              | 5         | 11         | 147        |
| Cottages Detached                      | 251      | 64 homes               | 5              | 9         | 14        | 11             | 6         | 17         | 236        |
| Terrace Homes Detached                 | 251      | 55 homes               | 4              | 8         | 12        | 9              | 6         | 15         | 202        |
| Independent Living                     | 253      | 175 units              | 6              | 5         | 11        | 16             | 14        | 30         | 354        |
| Assisted Living                        | 254      | <u>150 beds</u>        | <u>14</u>      | <u>7</u>  | <u>21</u> | <u>15</u>      | <u>18</u> | <u>33</u>  | <u>356</u> |
| Total Residential New Trips            |          | 790 units              | 55             | 79        | 134       | 107            | 82        | 189        | 2,423      |
|                                        |          |                        |                |           |           |                |           |            |            |
| Storage                                | 151      | 40,000 ft <sup>2</sup> | 3              | 3         | 6         | 5              | 5         | 10         | 100        |
|                                        |          |                        |                |           |           |                |           |            |            |
| Office                                 | 750      | 12,000 ft <sup>2</sup> | 18             | 3         | 21        | 2              | 16        | 18         | 138        |
| Retail Total Trips                     | 820      | 12,000 ft <sup>2</sup> | 7              | 5         | 12        | 21             | 24        | 45         | 512        |
| -pass-by                               |          | 15/25/15%              | <u>-1</u>      | <u>-1</u> | <u>-2</u> | <u>-5</u>      | <u>-6</u> | <u>-11</u> | <u>-76</u> |
| Retail New Trips                       |          |                        | <u>6</u>       | <u>4</u>  | <u>10</u> | <u>16</u>      | <u>18</u> | <u>34</u>  | <u>436</u> |
| Total Commercial New Trips             |          |                        | 24             | 7         | 31        | 18             | 34        | 52         | 574        |
|                                        |          |                        |                |           |           |                |           |            |            |
| Total Project New Trips                |          |                        | 82             | 89        | 171       | 130            | 121       | 251        | 3,097      |

Notes: The detached homes trip calculations employed ITE average rates due to numbers of units generally much smaller than average sizes in the ITE data. The office and retail calculations were based on ITE average rates due to square footages much smaller than average sizes in the ITE data.

### Willow Springs Townhomes

A small development of 90 senior-age-restricted townhomes is anticipated to be developed concurrently with the Lanier Tract DRI, along Karen Lane (shown in the site plan in Figure 4 at the northern end of the site, bordered in red). The trips for this development were calculated using ITE Land Use 252 – Senior Adult Housing – Attached. The Willow Springs trips are shown in Table 6.

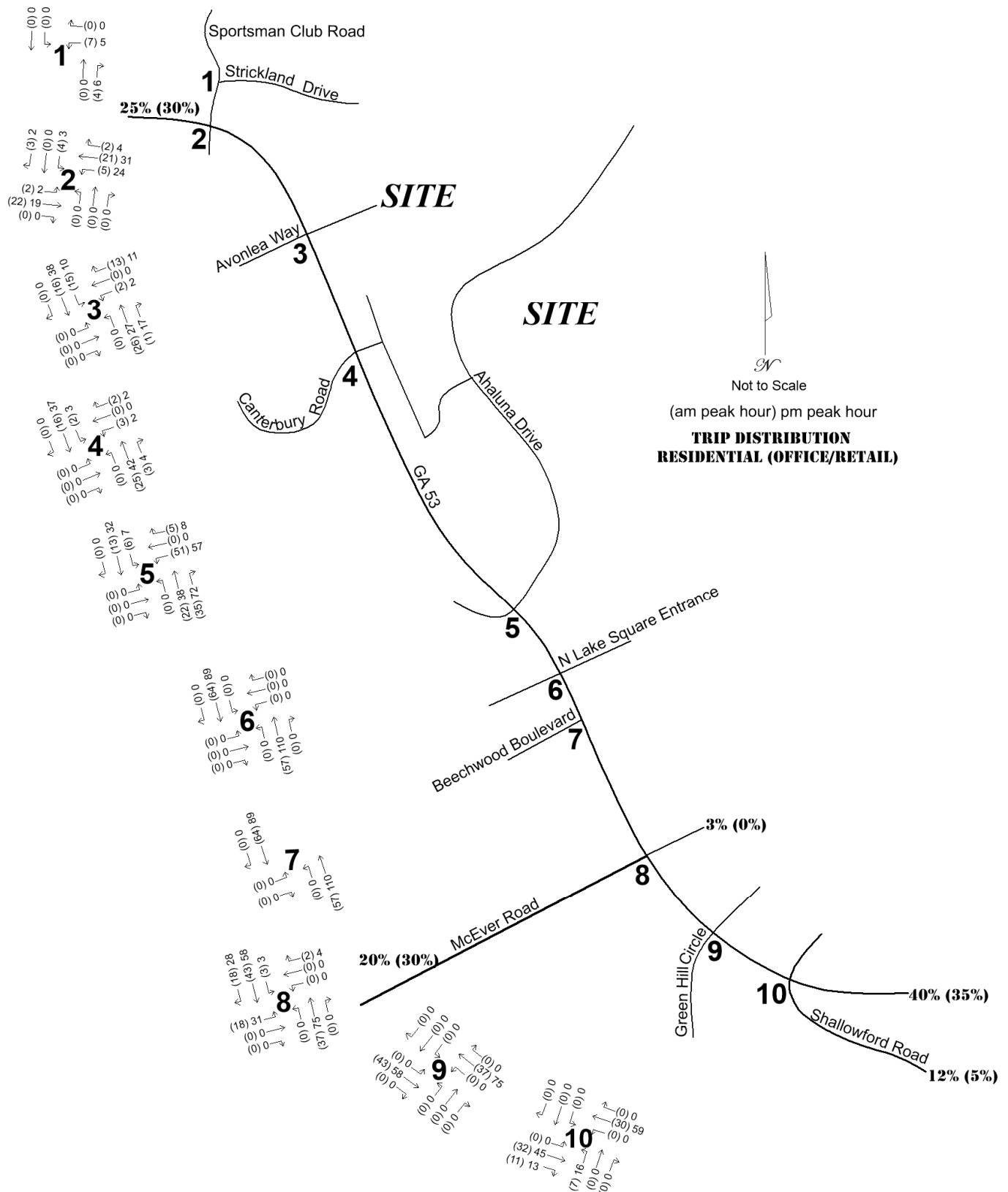
**Table 6 – Willow Springs Townhomes Trip Generation**

| Land Use                        | ITE Code | Size | A.M. Peak Hour |     |       | P.M. Peak Hour |     |       | 24-Hour |
|---------------------------------|----------|------|----------------|-----|-------|----------------|-----|-------|---------|
|                                 |          |      | In             | Out | Total | In             | Out | Total | 2-Way   |
| Senior Adult Housing - Attached | 252      | 90   | 6              | 12  | 18    | 12             | 11  | 23    | 290     |

## Trip Distribution and Assignment

The trip distribution percentages indicate what proportion of the project's trips will travel to and from various directions. The new trips were distributed based on the locations and proximity of likely trip origins and destinations for each land use. The residential trips, including the Willow Springs Townhomes, were distributed based on the locations of urban centers and retail nodes, while the office and retail trips were distributed based on population densities. The new project trips, shown in Table 5, were assigned to the roadway network based on these distribution percentages. Pass-by trips were assigned, where appropriate, based on existing traffic flows passing the site. The new trip distribution percentages for each land use, and the total peak hour trips expected to be generated by the site, are shown in Figure 5. The Willow Springs trips, shown in Table 6, were distributed to the study intersections using the same distribution as the Lanier Tract residential trips. These trips are not included in the site generated trips shown in Figure 5, but they are included in the future analysis. Appendix A contains intersection volume worksheets that show the specific Willow Springs trips (as well as all other Lanier Tract residential, office, and retail trips) for each movement at each intersection.



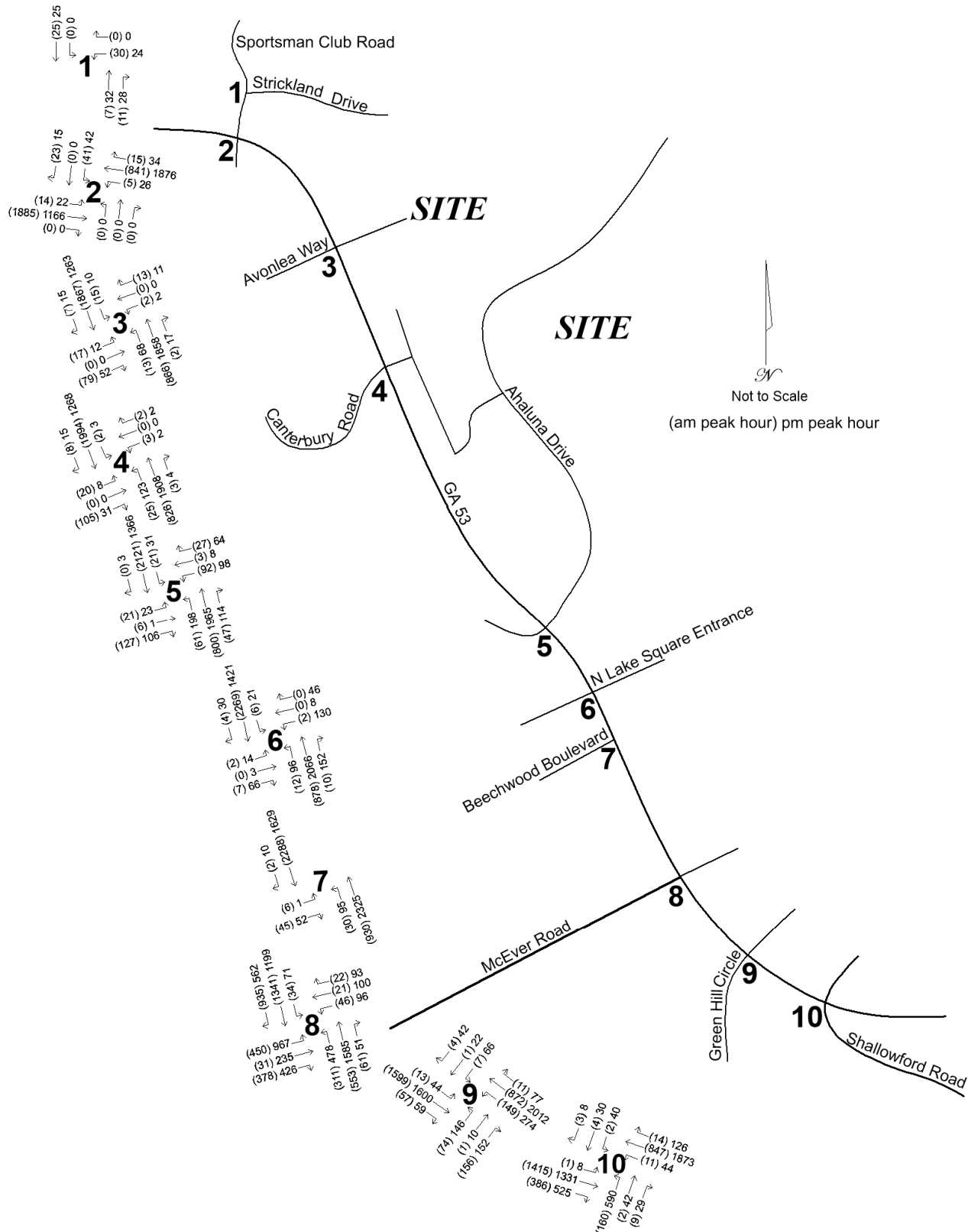


## Future Phase One Traffic Conditions

This section describes the anticipated future traffic conditions after the Lanier Tract DRI is fully constructed and operational.

### Future Phase One Traffic Volumes

The trips from the Lanier Tract DRI (and Willow Springs) were added to the future no-build volumes (comprised of the counted volumes increased by 10.4%, as described previously). The resulting volumes are the traffic volumes that will be at each intersection when the Lanier Tract is fully operational. A strip of land between the Lanier Tract and the east side of GA 53 is anticipated to be developed by others with retail outparcels at some future date. The impact of this outparcel development is evaluated in the Future Phase Two analysis, discussed later in this report. However, as part of the Lanier Tract development, a roadway will be constructed through that strip of land, to connect the Lanier Tract to GA 53 at the existing median break at Canterbury Road. The Future Phase One volumes and analysis include this connection. The Future Phase One traffic volume projections are shown in Figure 6. These volumes are also shown in the intersection volume worksheets in Appendix A.



## Future Phase One Intersection Operations

An operational analysis was performed for the Future Phase One conditions. Table 7 presents the results of this analysis. Computer printouts containing detailed results of the analysis are located in Appendix E.

**Table 7 – Future Phase One Intersection Operations**

| Intersection / Approach                       | A.M. Peak Hour |                | P.M. Peak Hour |                |
|-----------------------------------------------|----------------|----------------|----------------|----------------|
|                                               | LOS            | Delay s/veh    | LOS            | Delay s/veh    |
| 1. Sportsman Club Road at Strickland Drive    | A              | 4.2            | A              | 3.2            |
| southbound left turn                          | A              | 0.0            | A              | 0.0            |
| westbound approach                            | A              | 9.1            | A              | 9.2            |
| 2. Dawsonville Highway at Sportsman Club Road | C              | 23.0           | <b>F</b>       | <b>74.4</b>    |
| northbound approach (turn lane)               | A              | 0.0            | A              | 0.0            |
| southbound approach (Sportsman Club Road)     | <b>F</b>       | <b>834.4</b>   | <b>F</b>       | <b>2,872.3</b> |
| eastbound left turn (GA 53)                   | B              | 10.4           | C              | 18.7           |
| westbound left turn (GA 53)                   | C              | 20.5           | B              | 11.7           |
| 3. Dawsonville Highway at Avonlea Way         | A              | 9.8            | A              | 4.2            |
| northbound left turn (GA 53)                  | C              | 20.8           | B              | 12.6           |
| southbound left turn                          | B              | 10.3           | C              | 17.9           |
| eastbound left turn                           | <b>F</b>       | <b>1,381.4</b> | <b>F</b>       | <b>653.3</b>   |
| eastbound right turn                          | D              | 34.9           | C              | 15.1           |
| westbound left turn                           | <b>F</b>       | <b>288.1</b>   | <b>F</b>       | <b>696.5</b>   |
| westbound right turn                          | B              | 12.1           | C              | 20.5           |
| 4. Dawsonville Highway at Canterbury Road     | B              | 12.4           | A              | 3.8            |
| northbound left turn (GA 53)                  | C              | 22.2           | B              | 14.2           |
| southbound left turn                          | B              | 10.1           | C              | 17.8           |
| eastbound left turn                           | <b>F</b>       | <b>1,504.7</b> | <b>F</b>       | <b>767.5</b>   |
| eastbound right turn                          | E              | 43.3           | B              | 14.8           |
| westbound left turn                           | <b>F</b>       | <b>436.1</b>   | <b>F</b>       | <b>1,069.5</b> |
| westbound right turn                          | B              | 11.8           | C              | 20.0           |
| 5. Dawsonville Highway at Ahaluna Drive       | C              | 31.7           | C              | 21.4           |
| northbound approach (GA 53)                   | A              | 6.8            | B              | 15.7           |
| southbound approach (GA 53)                   | D              | 35.3           | C              | 20.4           |
| eastbound approach                            | D              | 46.8           | B              | 17.5           |
| westbound approach                            | <b>F</b>       | <b>134.1</b>   | <b>F</b>       | <b>104.1</b>   |
| 6. Dawsonville Highway at North Lake Square   | A              | 3.9            | B              | 17.4           |
| northbound approach (GA 53)                   | A              | 1.1            | B              | 15.9           |
| southbound approach (GA 53)                   | A              | 4.9            | B              | 11.8           |
| eastbound approach                            | E              | 69.5           | C              | 21.8           |
| westbound approach                            | E              | 70.0           | E              | 68.1           |
| 7. Dawsonville Highway at Beachwood Boulevard | A              | 3.3            | A              | 0.9            |
| northbound left turn (GA 53)                  | D              | 30.7           | C              | 17.1           |
| eastbound left turn                           | <b>F</b>       | <b>1,230.3</b> | <b>F</b>       | <b>534.2</b>   |

|                                             |          |              |          |              |
|---------------------------------------------|----------|--------------|----------|--------------|
| eastbound right turn                        | E        | 39.4         | C        | 19.8         |
| 8. Dawsonville Highway at McEver Road       | D        | 50.9         | <b>F</b> | <b>142.6</b> |
| northbound approach (GA 53)                 | E        | 77.0         | <b>F</b> | <b>161.1</b> |
| southbound approach (GA 53)                 | C        | 21.9         | E        | 59.3         |
| eastbound approach                          | <b>F</b> | <b>104.0</b> | <b>F</b> | <b>230.3</b> |
| westbound approach                          | E        | 60.9         | E        | 74.4         |
| 9. Dawsonville Highway at Green Hill Circle | B        | 14.9         | E        | 67.3         |
| northbound approach (GA 53)                 | A        | 8.6          | E        | 72.6         |
| southbound approach (GA 53)                 | B        | 14.3         | E        | 56.9         |
| eastbound approach                          | D        | 47.1         | E        | 59.7         |
| westbound approach                          | D        | 38.8         | <b>F</b> | <b>119.2</b> |
| 10. Dawsonville Highway at Shallowford Road | B        | 13.3         | E        | 78.6         |
| northbound approach (GA 53)                 | A        | 6.2          | E        | 73.6         |
| southbound approach (GA 53)                 | B        | 10.1         | E        | 66.1         |
| eastbound approach                          | E        | 76.5         | <b>F</b> | <b>128.7</b> |
| westbound approach                          | D        | 49.9         | E        | 77.7         |

A note is made here about the high delays accompanying some of the LOS F. As delays increase, the model's average delay per vehicle projections exceed model capabilities and the results become unrealistic. For example, it is highly improbable that the eastbound left turn from Canterbury Road will incur an average delay of 1,504.7 seconds, or 25 minutes, per vehicle. These high delay numbers are reported to provide an indication of the severity of the LOS F, and were reviewed with engineering judgment when developing conclusions and recommendations.

The operational analysis of Future Phase One conditions reveals some increases in delays from the no-build condition. The most notable changes are increases in the side street delays at both unsignalized and signalized intersections. The Lanier Tract DRI generally contributes a small proportion to the increases in volumes between the existing condition and the Future Phase One, while the background growth contributes a significant proportion of the increases. At most intersections, aside from the site access points along GA 53, the Lanier Tract DRI will contribute primarily to the major roadway through movements. The project's most significant impact will occur at four locations – Sportsman Club Road at GA 53, Avonlea Way at GA 53, Canterbury Road at GA 53, and Ahaluna Drive at GA 53, with the greatest impact being at Ahaluna Drive. The Future Phase One condition at each intersection is discussed briefly as follows:

1. **Sportsman Club Road at Strickland Drive** – Operations at this intersection are will continue to be excellent in the no-build condition. Therefore, no changes are recommended at this intersection for the Future Phase One condition.
2. **Dawsonville Highway at Sportsman Club Road** – The side street delays will continue to be very high in the future. However, the volumes incurring these delays will remain modest and it is considered unlikely that this intersection would be a good candidate for signalization, even in the Future Phase One condition.



3. **Dawsonville Highway at Avonlea Way** – The Lanier Tract DRI will replace the existing private driveway at this location, with a main access to the project. The alignment with the median break will allow full movement operations at this site access. However, it is anticipated that volumes using this access will be modest for a few reasons. First, most of the site trips will be oriented to and from the south on GA 53. Therefore, the propensity of most trips will be to travel along Ahaluna Drive to the signal at GA 53, rather than to turn in and out of the unsignalized access across from Avonlea Way. Some trips traveling to and from the north will use this access and some will use the connection through the site to Strickland Drive. For these reasons, the volumes exiting the site at this location will be low, and will include more right turners than left turners. On the existing eastbound approach of Avonlea Way, the right turn volumes are also notably higher than the left turners. This is an indication that this intersection is unlikely to meet warrants for signalization in the future. No signal warrant analysis was performed at this intersection as part of this study. A right turn lane analysis (presented later) was performed for the northbound direction of GA 53 at the site access at Avonlea Way. The analysis indicates that it is likely that a right turn lane will be justified at this location in the Future Phase One condition and the site plan includes this lane.
4. **Dawsonville Highway at Canterbury Road** – As with the Avonlea intersection, the volumes entering and exiting the Lanier Tract at Canterbury will be very low. The circuitous road configuration through the adjacent future retail tracts will further discourage use of this access. Therefore, for Future Phase One, this intersection is considered unlikely to meet signal warrants. No signal warrant analysis was performed at this intersection as part of this study. A right turn lane analysis (presented later) was performed for the northbound direction of GA 53 at the site access at Canterbury Road. The analysis indicates that it is *not* likely that a right turn lane will be justified at this location in the Future Phase One condition.
5. **Dawsonville Highway at Ahaluna Drive** – The Ahaluna Drive approach will continue to operate at LOS F and the delays will increase. The mitigation discussed in the existing condition is still applicable, including the addition of a northbound right turn lane on GA 53 and a second westbound lane on Ahaluna Drive.
6. **Dawsonville Highway at North Lake Square Access** – This intersection will operate comparably in the future as in the existing and no-build conditions. No mitigation is identified for this intersection in the Future Phase One condition.
7. **Dawsonville Highway at Beachwood Boulevard** – The operations at this unsignalized intersections will continue comparable to the existing and no-build conditions, with the GA 53 approaches operating well, moderate delays for the side street right turn movement, and high delays for the side street left turn movement. The side street volumes will continue to be predominately right turners, with extremely low left turn volumes. For this reason, this intersection is considered unlikely to meet warrants for signalization in the future.
8. **Dawsonville Highway at McEver Road** – Operations will continue to be congested at this intersection, with the overall intersection operating at LOS F in the p.m., and several approaches operating at LOS F in the a.m. and/or p.m. The mitigation discussed in the existing condition is still applicable. This intersection is built-out and the mitigation discussed in the existing analysis includes the addition of a second

southbound right turn lane. Short of widening GA 53 with additional through lanes, or reducing volumes at this intersection, there are not many additional options to mitigate the high delays.

9. **Dawsonville Highway at Green Hill Circle** – Delays will increase from the no-build condition to the future. A.M. peak operations will continue to be acceptable, while the p.m. peak will teeter between LOS E and LOS F. No new mitigation is identified for the Future Phase One condition.
10. **Dawsonville Highway at Shallowford Road** – Delays will increase from the no-build condition, but will generally remain acceptable in the a.m. and at the LOS E to LOS F threshold in the p.m. No new mitigation is identified for the Future Phase One condition.

## Future Phase Two Traffic Conditions

A strip of land along the east side of GA 53, west of the Lanier Tract, is anticipated to be developed by others at some future date. A Future Phase Two condition was developed to assess the traffic operations after this land is developed.

The land is anticipated to be developed as seven outparcels, with 8,000 square feet of retail shopping on each, for a total of 56,000 square feet of retail shopping. The trip generation of the outparcels is presented in Table 8.

**Table 8 – Outparcel Trip Generation**

| Land Use              | ITE Code | Size                   | A.M. Peak Hour |            |            | P.M. Peak Hour |            |             | 24-Hour       |
|-----------------------|----------|------------------------|----------------|------------|------------|----------------|------------|-------------|---------------|
|                       |          |                        | In             | Out        | Total      | In             | Out        | Total       | 2-Way         |
| Outparcel Total Trips | 820      | 56,000 ft <sup>2</sup> | 68             | 41         | 109        | 195            | 211        | 406         | 4,658         |
| -pass-by              |          | 30/40/30%              | <u>-20</u>     | <u>-12</u> | <u>-32</u> | <u>-78</u>     | <u>-84</u> | <u>-162</u> | <u>-1,398</u> |
| Outparcel New Trips   |          |                        | 48             | 29         | 77         | 117            | 127        | 244         | 3,260         |

The outparcels will be served by a full movement access that will align with the existing median break on GA 53 at Canterbury Road. A connecting roadway will run through the outparcel property and connect to the main roadway through the western portion of the Lanier Tract (connecting Strickland Drive to Ahaluna Drive). The connecting roadway through the outparcel property was assumed to be constructed during the development of the Lanier Tract, and was included in the Future Phase One analysis, as discussed previously. This will allow trips from the proposed Lanier Tract to access GA 53.

The trips that will be generated by the outparcels were distributed to the study intersections using the same trip distribution percentages developed for the retail portion of the Lanier Tract DRI (with one minor difference – five percent of the outparcel trips were distributed back into the Lanier Tract, in anticipation of the trips that will travel between the outparcels and the Lanier Tract DRI. This five percent was subtracted from the south, to and from McEver Road). The Lanier Tract distribution percentages were shown previously in this report, in Figure 5.

## Future Phase Two Traffic Volumes

The trips from the outparcels were added to the Future Phase One volumes (comprised of the counted volumes increased by 10.4%, plus the Lanier Tract and Willow Springs trips, as described previously). The resulting volumes are the traffic volumes that will be at each intersection when the outparcels are developed and operational. The Future Phase Two traffic volume projections are shown in Figure 7. These volumes are also shown in the intersection volume worksheets in Appendix A.

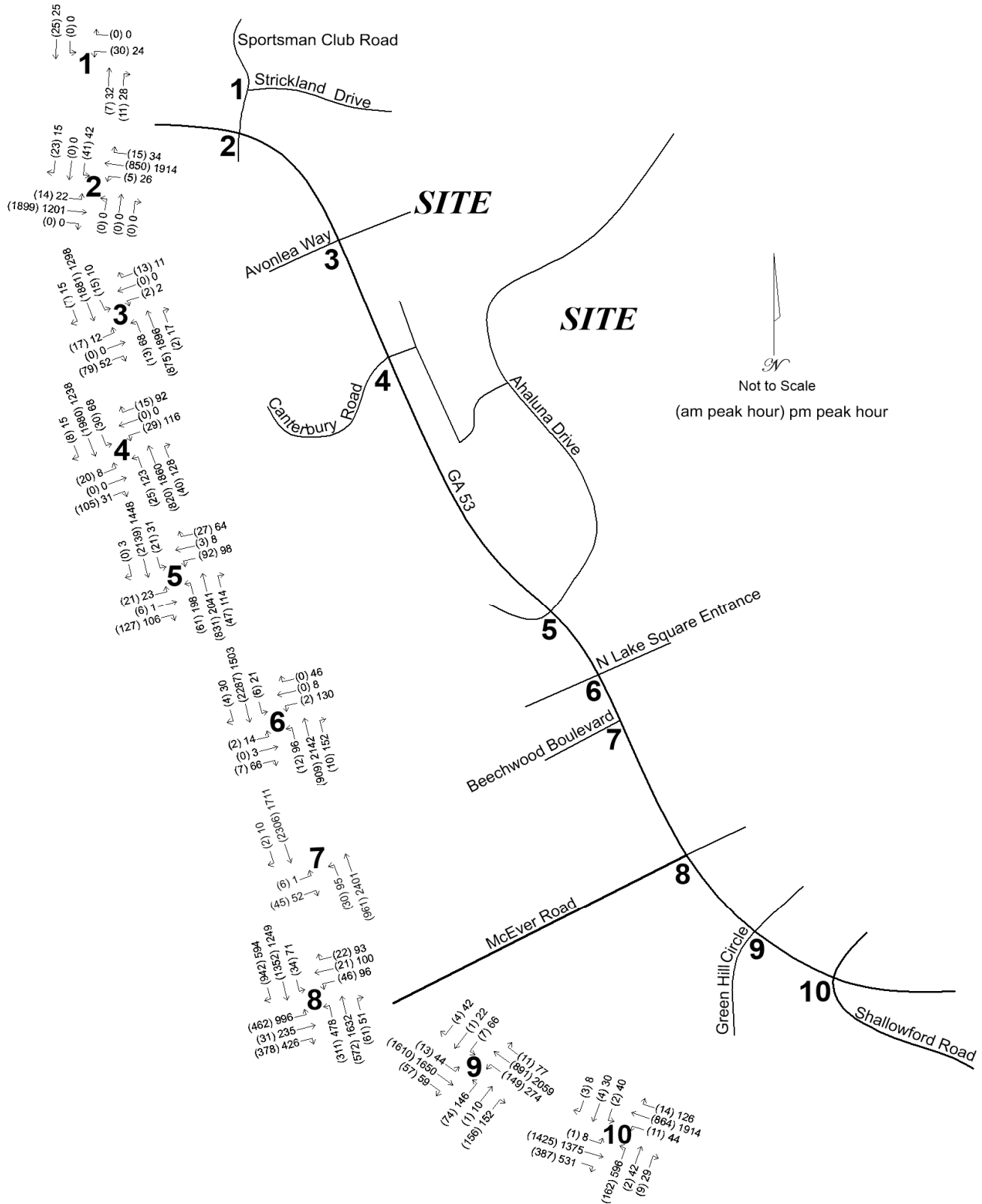


Figure 7 – Future Phase Two Peak Hour Traffic Volume Projections

## Future Phase Two Intersection Operations

An operational analysis was performed for the Future Phase Two conditions. Table 9 presents the results of this analysis. Computer printouts containing detailed results of the analysis are located in Appendix E.

**Table 9 – Future Phase Two Intersection Operations**

| Intersection / Approach                       | A.M. Peak Hour |                | P.M. Peak Hour |                 |
|-----------------------------------------------|----------------|----------------|----------------|-----------------|
|                                               | LOS            | Delay s/veh    | LOS            | Delay s/veh     |
| 1. Sportsman Club Road at Strickland Drive    | A              | 4.2            | A              | 3.2             |
| southbound left turn                          | A              | 0.0            | A              | 0.0             |
| westbound approach                            | A              | 9.1            | A              | 9.2             |
| 2. Dawsonville Highway at Sportsman Club Road | C              | 23.7           | <b>F</b>       | <b>74.3</b>     |
| northbound approach (turn lane)               | A              | 0.0            | A              | 0.0             |
| southbound approach (Sportsman Club Road)     | <b>F</b>       | <b>866.3</b>   | <b>F</b>       | <b>3,330.7</b>  |
| eastbound left turn (GA 53)                   | B              | 10.5           | C              | 19.2            |
| westbound left turn (GA 53)                   | C              | 20.8           | B              | 11.9            |
| 3. Dawsonville Highway at Avonlea Way         | B              | 11.1           | A              | 4.5             |
| northbound left turn (GA 53)                  | C              | 21.1           | B              | 12.8            |
| southbound left turn                          | B              | 10.4           | C              | 18.4            |
| eastbound left turn                           | <b>F</b>       | <b>1,593.4</b> | <b>F</b>       | <b>722.2</b>    |
| eastbound right turn                          | E              | 35.6           | C              | 15.5            |
| westbound left turn                           | <b>F</b>       | <b>311.5</b>   | <b>F</b>       | <b>833.9</b>    |
| westbound right turn                          | B              | 12.2           | C              | 21.0            |
| 4. Dawsonville Highway at Canterbury Road     | D              | 29.0           | <b>F</b>       | <b>852.3</b>    |
| northbound left turn (GA 53)                  | C              | 22.0           | B              | 13.9            |
| southbound left turn                          | B              | 10.5           | C              | 20.7            |
| eastbound left turn                           | <b>F</b>       | <b>1,733.4</b> | <b>F</b>       | <b>2,303.8</b>  |
| eastbound right turn                          | E              | 42.2           | B              | 14.6            |
| westbound left turn                           | <b>F</b>       | <b>1712.5</b>  | <b>F</b>       | <b>19,977.6</b> |
| westbound right turn                          | B              | 12.2           | D              | 33.7            |
| 5. Dawsonville Highway at Ahaluna Drive       | C              | 32.6           | C              | 22.8            |
| northbound approach (GA 53)                   | A              | 6.8            | B              | 17.0            |
| southbound approach (GA 53)                   | D              | 37.1           | C              | 22.3            |
| eastbound approach                            | D              | 46.8           | B              | 17.7            |
| westbound approach                            | <b>F</b>       | <b>134.1</b>   | <b>F</b>       | <b>106.1</b>    |
| 6. Dawsonville Highway at North Lake Square   | A              | 4.0            | B              | 18.2            |
| northbound approach (GA 53)                   | A              | 1.2            | B              | 16.7            |
| southbound approach (GA 53)                   | A              | 5.1            | B              | 13.1            |
| eastbound approach                            | E              | 69.5           | C              | 21.8            |
| westbound approach                            | E              | 70.0           | E              | 68.1            |
| 7. Dawsonville Highway at Beachwood Boulevard | A              | 3.3            | A              | 1.0             |
| northbound left turn (GA 53)                  | D              | 31.5           | C              | 18.4            |
| eastbound left turn                           | <b>F</b>       | <b>1,230.3</b> | <b>F</b>       | <b>620.4</b>    |



|                                             |          |              |          |              |
|---------------------------------------------|----------|--------------|----------|--------------|
| eastbound right turn                        | E        | 40.4         | C        | 21.0         |
| 8. Dawsonville Highway at McEver Road       | D        | 52.3         | <b>F</b> | <b>154.3</b> |
| northbound approach (GA 53)                 | E        | 75.8         | <b>F</b> | <b>163.8</b> |
| southbound approach (GA 53)                 | C        | 22.2         | E        | 60.3         |
| eastbound approach                          | <b>F</b> | <b>111.2</b> | <b>F</b> | <b>270.3</b> |
| westbound approach                          | E        | 60.9         | E        | 78.5         |
| 9. Dawsonville Highway at Green Hill Circle | B        | 15.0         | E        | 68.5         |
| northbound approach (GA 53)                 | A        | 8.7          | E        | 73.0         |
| southbound approach (GA 53)                 | B        | 14.4         | E        | 59.3         |
| eastbound approach                          | D        | 47.4         | E        | 59.8         |
| westbound approach                          | D        | 38.8         | <b>F</b> | <b>119.2</b> |
| 10. Dawsonville Highway at Shallowford Road | B        | 13.5         | <b>F</b> | <b>83.2</b>  |
| northbound approach (GA 53)                 | A        | 6.4          | E        | 75.2         |
| southbound approach (GA 53)                 | B        | 10.4         | E        | 76.1         |
| eastbound approach                          | E        | 76.4         | <b>F</b> | <b>127.7</b> |
| westbound approach                          | D        | 49.9         | E        | 77.7         |

The outparcels' trips will generally be added to the major through movements at each study intersection, and will increase overall intersection delays at each location. The most significant impact of the outparcels will be incurred at the Canterbury intersection, which will serve as the primary access point to GA 53 for all of the outparcels. The operational analysis at this intersection shows that the overall intersection will deteriorate to LOS F in the p.m. and the side street left turns will experience extremely high delays. Because many of the new side street trips exiting the outparcels will be left turners, this intersection becomes a more likely candidate for signalization in the Future Phase Two condition. It is recommended that a signal warrant analysis be performed for this location in the future when the outparcels are planned to be developed. The Georgia DOT right turn lane analysis provided in the next section of this report indicates that a northbound right turn lane on GA 53 at this site access will be necessary in the Future Phase Two condition, when the outparcels are developed and operational.

## Georgia DOT Auxiliary Turn Lane Standards

The four primary site connection points to GA 53 will occur at Sportsman Club Road, across from Avonlea Way, across from Canterbury Road, and via Ahaluna Drive. All four locations are served by existing median breaks and southbound exclusive left turn lanes are already provided, which will serve the site entering left turn traffic, at each location. However, there are no northbound exclusive right turn lanes, which would serve site entering right turn traffic, at any of these locations. The standards proscribed in the Georgia DOT's *Regulations for Driveway and Encroachment Control* (Driveway Manual), revision 4.0, dated 3/15/2016, were reviewed for the requirements for right turn lanes. Table 10, below, is Table 4-6 from the Driveway Manual, and proscribes the right turn volume thresholds at which exclusive right turn lanes must be provided.

**Table 10 – Georgia DOT Minimum Volume Requirements for Right Turn Lanes**

| Posted Speed   | 2 Lane Routes |               | More than 2 Lanes on Main Road |               |
|----------------|---------------|---------------|--------------------------------|---------------|
|                | AADT          |               | AADT                           |               |
|                | < 6000        | >=6000        | <10000                         | >=10000       |
| 35 MPH or Less | 200 RTV a day | 100 RTV a day | 200 RTV a day                  | 100 RTV a day |
| 40 to 50 MPH   | 150 RTV a day | 75 RTV a day  | 150 RTV a day                  | 75 RTV a day  |
| 55 to 60 MPH   | 100 RTV a day | 50 RTV a day  | 100 RTV a day                  | 50 RTV a day  |
| >= 65 MPH      | Always        | Always        | Always                         | Always        |

**Table 4-6 Minimum Volumes Requiring Right Turn Lanes**

The AADT on GA 53 near Sportsman Club Road was identified previously in Table 2 in this report as 25,600 vpd in 2015, and the posted speed limit is 45 mph. For main roads with these conditions, a right turn lane must be provided when the right turn volume exceeds 75 right turn vehicles (RTV) per day. This study calculated a.m. and p.m. peak hour right turn volumes. As a general rule of thumb, p.m. peak hour volumes are typically about 10% of 24-hour volumes. However, field observations suggest that the off-peak activity turning into and out of these intersections currently is very low, so it is uncertain if the 10% rule of thumb is applicable. Using the a.m. and p.m. volume projections, and the 10% rule of thumb to estimate 24-hour RTVs, the existing, no-build, Future Phase One, and Future Phase Two volumes were tested against the Georgia DOT right turn lane standard at the four primary site access locations on GA 53. This analysis is summarized in Table 11.

**Table 11 – Georgia DOT Right Turn Lane Standards for Northbound GA 53**

| Intersection<br>GA 53 at: | 24-Hour<br>RTV<br>Threshold | Existing |      |       | No-Build |      |       | Future Phase One |      |       | Future Phase Two |      |       |
|---------------------------|-----------------------------|----------|------|-------|----------|------|-------|------------------|------|-------|------------------|------|-------|
|                           |                             | a.m.     | p.m. | 24-hr | a.m.     | p.m. | 24-hr | a.m.             | p.m. | 24-hr | a.m.             | p.m. | 24-hr |
| Sportsman                 | 75                          | 8        | 19   | 190   | 9        | 21   | 210   | 15               | 34   | 340   | 15               | 34   | 340   |
| Avonlea                   | 75                          | 0        | 0    | 0     | 0        | 0    | 0     | 2                | 17   | 170   | 2                | 17   | 170   |
| Canterbury                | 75                          | 0        | 0    | 0     | 0        | 0    | 0     | 3                | 4    | 40    | 40               | 128  | 1,280 |
| Ahaluna                   | 75                          | 11       | 38   | 380   | 12       | 42   | 420   | 47               | 114  | 1,140 | 47               | 114  | 1,140 |

The results in Table 11 indicate that a northbound right turn lane is possibly justified in the existing condition on GA 53 at Sportsman Club Road and almost certainly justified on GA 53 at Ahaluna Drive. The increase in volumes to the no-build condition will increase the justification for these right turn lanes. The Lanier Tract will add trips to each intersection and create the fourth approaches at the median breaks at Avonlea Way and Canterbury Road. Table 10 suggests that a northbound right turn lane is likely to be justified at the Avonlea Way access but not at the Canterbury access with the development of the Lanier Tract. With the development of the retail outparcels in Future Phase Two, a northbound right turn lane is also expected to be justified at the Canterbury access.

Table 12, below, is Table 4-8 from the Driveway Manual, and presents the Georgia DOT right turn lane design standards. Based on the posted 45 mph speed limit, each northbound right turn lane on GA 53 should include 175 feet of full-width storage and a 100 foot taper.

**Table 12 – Georgia DOT Design Standards for Right Turn Lanes**

| Speed, mph | Full Width Storage, ft. | Taper, ft. |
|------------|-------------------------|------------|
| 25         |                         | 50         |
| 30         | 75                      | 50         |
| 35         | 100                     | 50         |
| 40         | 150                     | 50         |
| 45         | 175                     | 100        |
| 50         | 225                     | 100        |
| 55         | 250                     | 100        |
| 60         | 300                     | 100        |
| 65         | 350                     | 100        |

**Table 4-8 Minimum Right Turn Deceleration Lengths**

The site plan also anticipates providing two right-in / right-out RIRO accesses to the office / retail tract and the plan anticipates providing deceleration lanes on GA 53 at both of these accesses. It is recommended that these anticipated deceleration lanes also be constructed to satisfy the Driveway Manual standards.

The project site engineer is referred to the Georgia DOT Driveway Manual for other driveway design standards including driveway width, island design, and curb return radii.

## Summary of Study Findings and Recommendations

The following is a summary of the findings and the recommendations of this traffic impact study at each intersection:

1. **Sportsman Club Road at Strickland Drive** – No changes are recommended at this intersection for the existing, no-build, or Future Phase One and Future Phase Two conditions.
2. **Dawsonville Highway at Sportsman Club Road** – The side street delays at this intersection are significant now and will increase in the future. While a warrant analysis was not performed as part of this traffic impact study, the low side street volumes make the intersection an unlikely candidate for signalization. The potential for justifying signalization will increase in the future, but side street volumes will continue to remain moderate. This study also identifies the need for a northbound exclusive right turn lane to be added on GA 53 at Sportsman Club Road. Northbound and southbound exclusive left turn lanes are currently provided at this median break.
3. **Dawsonville Highway at Avonlea Way** – Side street delays are high at the existing eastbound approach of Avonlea Way, and these delays will increase in the no-build and future conditions. The side street volumes are predominately right turners, with extremely low left turn volumes. The Lanier Tract will introduce a new fourth leg at the Avonlea Way intersection (there is an existing private residential driveway at this median break, which would be replaced by the Lanier Tract access). Northbound and southbound exclusive left turn lanes are currently provided at this median break. The volumes exiting the new Lanier Tract access will be low and many of them will be right turners. Therefore, this intersection is considered unlikely to be a candidate for signalization in the existing, no-build, and Future Phases One and Two, even with the addition of the Lanier Tract trips. The Georgia DOT right turn lane analysis suggests that a northbound exclusive right turn lane should be considered at this access and the site plan includes the addition of this lane. The new site access should be constructed with one entering lane and one exiting lane. The side street approach exiting the site should be controlled by side street stop sign and accompanying stop bar.
4. **Dawsonville Highway at Canterbury Road** – Side street delays are high on the existing eastbound approach of Canterbury Road and these delays will increase in the no-build and future conditions. As with Avonlea Way, the side street volumes at this intersection are predominately right turners, with extremely low left turn volumes. For this reason, this intersection is considered an unlikely candidate for signalization in the existing, no-build, and Future Phase One conditions. The outparcel access will align with Canterbury Road and the Lanier Tract will connect through the outparcels to GA 53 at this location. Northbound and southbound exclusive left turn lanes are currently provided at this median break. A short southbound deceleration lane is provided on GA 53 at Canterbury Road, though this lane does not appear to have been constructed to current Georgia DOT design standards. The northbound right turn volume will be low in the Future Phase One condition, and the Georgia DOT right turn lane analysis indicates that no decel lane will be required for Future Phase One. However, with the future development of the retail outparcels, by others, the right turn volumes will be significant, primarily due to the outparcels, and a northbound deceleration lane is recommended for this location. The Future Phase Two side street volumes exiting the outparcels will

be notable and this intersection will likely be a prime candidate for signalization upon development of the outparcels. It is recommended that at such time as the outparcels are planned to be developed, a signal warrant study be performed for this intersection according to the standards set forth in the Federal Highway Administration's *Manual On Uniform Traffic Control Devices* (MUTCD). This new access at the Canterbury Road median break should be constructed with at least one entering lane and an exiting shared left/through lane and an exclusive right turn lane. The two westbound lanes are in anticipation of the development of the outparcels. With only the Lanier Tract volumes, only one entering and one exiting lane would be required. Until signalization is warranted, the side street approach exiting the outparcel tracts should be controlled by side street stop sign and accompanying stop bar.

5. **Dawsonville Highway at Ahaluna Drive** – The review of Georgia DOT auxiliary lane standards indicates that a northbound right turn lane should be added on GA 53 at Ahaluna Drive in the existing condition. The future volumes exiting Ahaluna Drive would benefit from the addition of a second westbound lane, resulting in a shared left/through lane and an exclusive right turn lane on Ahaluna Drive at GA 53. This second lane would reduce the demand for side street greentime on the signal and improve side street levels of service. It was noted that the need for relocation of the signal steel strain pole, a drainage structure, and possibly a large brick monument sign, may reduce the feasibility of adding this second westbound lane. With the addition of Lanier Tract southbound left turns from GA 53, consideration should be given to adding a protected / permissive southbound left turn phase, which would match the existing protected / permissive phasing for the northbound left turn. The Georgia DOT left turn phase warrants are not satisfied for this southbound left turn based on volume projections alone. However, other factors such as high speeds on GA 53 and the senior residents expected to reside at the Lanier Tract, merit consideration. Field observations suggest that there may be an opportunity to shorten the cycle length, which would reduce time spent by vehicles waiting on the side street.
6. **Dawsonville Highway at North Lake Square Access** – This intersection operates acceptably in all analysis conditions. The side street approaches do incur some delays at all times, primarily due to the long cycle length on the signal, which allocates most of the greentime, appropriately, to GA 53. The side street delays are incurred by minimal volumes in the a.m., since the retail served by the side streets are generally not operational at that time. Higher volumes incur the side street delays in the p.m., when the retail is operational. However, overall this intersection operates appropriately and no mitigation is recommended for any analysis condition.
7. **Dawsonville Highway at Beachwood Boulevard** At the GA 53 / Beechwood Boulevard intersection, it is noted that a fourth leg is currently stubbed-out across from Beechwood Boulevard and a retail development is under construction on that site. Auxiliary left and right turn lanes are provided on GA 53 serving Beechwood Boulevard and the future fourth leg appears to be designed for right-in / right-out access only, with a northbound deceleration lane provided on GA 53. No changes are recommended at this intersection based on this study.
8. **Dawsonville Highway at McEver Road** – The lane configuration and signal phasing at this intersection are generally appropriate. The existing southbound right turn volume is sufficiently-high (828 a.m., 481 p.m.) to



merit consideration of the addition of a second exclusive right turn lane and/or the addition of a protected right turn overlap phase. The justification for adding this phasing and/or second right turn lane will increase as volumes increase. Finally, there may be an opportunity to reduce the cycle length and fine-tune the signal timing at this intersection.

9. **Dawsonville Highway at Green Hill Circle** – This signalized intersection incurs high sides street delays, again, due to the allocation of the majority of greentime to the Dawsonville Highway approaches. There may be an opportunity to reduce the cycle length and fine-tune the signal timing at this intersection.
10. **Dawsonville Highway at Shallowford Road** – The lane configuration and signal phasing are appropriate for this intersection. Reduction of the cycle length and optimization of the allocation of greentime could reduce delays and queuing at this intersection.

## Appendix A

### Traffic Count Data and Volume Worksheets

**Lanier Tract Multi-Use DRI Traffic Impact Study**  
City of Gainesville, Georgia

April 2017

**Intersection 1: Sportsman Club Road at Strickland Drive**

| Weekday A.M. Peak Hour                               | Northbound Sportsman Club Road |       |     | Southbound Sportsman Club Road |       |     | Westbound Strickland Drive |       |     |
|------------------------------------------------------|--------------------------------|-------|-----|--------------------------------|-------|-----|----------------------------|-------|-----|
|                                                      | T                              | R     | Tot | L                              | T     | Tot | L                          | R     | Tot |
| <b>Counted Volumes (Thursday, November 17, 2016)</b> | 6                              | 1     | 7   | 0                              | 23    | 23  | 10                         | 0     | 10  |
| Annual Background Growth                             | 10.4%                          | 10.4% |     | 10.4%                          | 10.4% |     | 10.4%                      | 10.4% |     |
| <b>No-Build Volumes</b>                              | 7                              | 1     | 8   | 0                              | 25    | 25  | 11                         | 0     | 11  |
| <b>Willow Springs Townhomes</b>                      | 0                              | 6     | 6   | 0                              | 0     | 0   | 12                         | 0     | 12  |
| Lanier Tract Senior Living Residential New Trips     | 0                              | 4     | 4   | 0                              | 0     | 0   | 7                          | 0     | 7   |
| Lanier Tract Office/Retail New Trips                 | 0                              | 0     | 0   | 0                              | 0     | 0   | 0                          | 0     | 0   |
| <b>Total Lanier Tract Site Trips</b>                 | 0                              | 4     | 4   | 0                              | 0     | 0   | 7                          | 0     | 7   |
| <b>Phase 1 Future Volumes</b>                        | 7                              | 11    | 18  | 0                              | 25    | 25  | 30                         | 0     | 30  |
| Retail Outparcels                                    | 0                              | 0     | 0   | 0                              | 0     | 0   | 0                          | 0     | 0   |
| <b>Phase 2 Future Volumes</b>                        | 7                              | 11    | 18  | 0                              | 25    | 25  | 30                         | 0     | 30  |

| Weekday P.M. Peak Hour                                | Northbound Sportsman Club Road |       |     | Southbound Sportsman Club Road |       |     | Westbound Strickland Drive |       |     |
|-------------------------------------------------------|--------------------------------|-------|-----|--------------------------------|-------|-----|----------------------------|-------|-----|
|                                                       | T                              | R     | Tot | L                              | T     | Tot | L                          | R     | Tot |
| <b>Counted Volumes (Thursday, September 17, 2015)</b> | 29                             | 9     | 38  | 0                              | 23    | 23  | 7                          | 0     | 7   |
| Annual Background Growth                              | 10.4%                          | 10.4% |     | 10.4%                          | 10.4% |     | 10.4%                      | 10.4% |     |
| <b>No-Build Volumes</b>                               | 32                             | 10    | 42  | 0                              | 25    | 25  | 8                          | 0     | 8   |
| <b>Willow Springs Townhomes</b>                       | 0                              | 12    | 12  | 0                              | 0     | 0   | 11                         | 0     | 11  |
| Lanier Tract Senior Living Residential New Trips      | 0                              | 6     | 6   | 0                              | 0     | 0   | 5                          | 0     | 5   |
| Lanier Tract Office/Retail New Trips                  | 0                              | 0     | 0   | 0                              | 0     | 0   | 0                          | 0     | 0   |
| <b>Total Lanier Tract Site Trips</b>                  | 0                              | 6     | 6   | 0                              | 0     | 0   | 5                          | 0     | 5   |
| <b>Phase 1 Future Volumes</b>                         | 32                             | 28    | 60  | 0                              | 25    | 25  | 24                         | 0     | 24  |
| Retail Outparcels                                     | 0                              | 0     | 0   | 0                              | 0     | 0   | 0                          | 0     | 0   |
| <b>Phase 2 Future Volumes</b>                         | 32                             | 28    | 60  | 0                              | 25    | 25  | 24                         | 0     | 24  |

**MARC R. ACAMPORA, PE, LLC**

**Lanier Tract Multi-Use DRI Traffic Impact Study**  
City of Gainesville, Georgia

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**Intersection 2: Georgia State Route 53 at Sportsman Club Road**

| Weekday A.M. Peak Hour                               |                  |       |       |     |                  |       |       |      |                     |       |       |     |                               |       |       |     |
|------------------------------------------------------|------------------|-------|-------|-----|------------------|-------|-------|------|---------------------|-------|-------|-----|-------------------------------|-------|-------|-----|
|                                                      | Northbound GA 53 |       |       |     | Southbound GA 53 |       |       |      | Eastbound turn lane |       |       |     | Westbound Sportsman Club Road |       |       |     |
|                                                      | L                | T     | R     | Tot | L                | T     | R     | Tot  | L                   | T     | R     | Tot | L                             | T     | R     | Tot |
| <b>Counted Volumes (Thursday, November 17, 2016)</b> | 0                | 743   | 8     | 751 | 9                | 1687  | 0     | 1696 | 0                   | 0     | 0     | 0   | 25                            | 0     | 15    | 40  |
| Annual Background Growth                             | 10.4%            | 10.4% | 10.4% |     | 10.4%            | 10.4% | 10.4% |      | 10.4%               | 10.4% | 10.4% |     | 10.4%                         | 10.4% | 10.4% |     |
| <b>No-Build Volumes</b>                              | 0                | 820   | 9     | 829 | 10               | 1863  | 0     | 1873 | 0                   | 0     | 0     | 0   | 28                            | 0     | 17    | 44  |
| <b>Willow Springs Townhomes</b>                      | 0                | 0     | 4     | 4   | 2                | 0     | 0     | 2    | 0                   | 0     | 0     | 0   | 9                             | 0     | 3     | 12  |
| Lanier Tract Senior Living Residential New Trips     | 0                | 19    | 2     | 21  | 2                | 15    | 0     | 17   | 0                   | 0     | 0     | 0   | 4                             | 0     | 3     | 7   |
| Lanier Tract Office/Retail New Trips                 | 5                | 2     | 0     | 7   | 0                | 7     | 0     | 7    | 0                   | 0     | 0     | 0   | 0                             | 0     | 0     | 0   |
| <b>Total Lanier Tract Site Trips</b>                 | 5                | 21    | 2     | 28  | 2                | 22    | 0     | 24   | 0                   | 0     | 0     | 0   | 4                             | 0     | 3     | 7   |
| <b>Phase 1 Future Volumes</b>                        | 5                | 841   | 15    | 861 | 14               | 1885  | 0     | 1899 | 0                   | 0     | 0     | 0   | 41                            | 0     | 23    | 63  |
| Retail Outparcels                                    | 0                | 9     | 0     | 9   | 0                | 14    | 0     | 14   | 0                   | 0     | 0     | 0   | 0                             | 0     | 0     | 0   |
| <b>Phase 2 Future Volumes</b>                        | 5                | 850   | 15    | 870 | 14               | 1899  | 0     | 1913 | 0                   | 0     | 0     | 0   | 41                            | 0     | 23    | 63  |

| Weekday P.M. Peak Hour                                |                  |       |       |      |                  |       |       |      |                     |       |       |     |                               |       |       |     |
|-------------------------------------------------------|------------------|-------|-------|------|------------------|-------|-------|------|---------------------|-------|-------|-----|-------------------------------|-------|-------|-----|
|                                                       | Northbound GA 53 |       |       |      | Southbound GA 53 |       |       |      | Eastbound turn lane |       |       |     | Westbound Sportsman Club Road |       |       |     |
|                                                       | L                | T     | R     | Tot  | L                | T     | R     | Tot  | L                   | T     | R     | Tot | L                             | T     | R     | Tot |
| <b>Counted Volumes (Thursday, September 17, 2015)</b> | 2                | 1671  | 19    | 1692 | 15               | 1039  | 0     | 1054 | 0                   | 0     | 0     | 0   | 28                            | 0     | 9     | 37  |
| Annual Background Growth                              | 10.4%            | 10.4% | 10.4% |      | 10.4%            | 10.4% | 10.4% |      | 10.4%               | 10.4% | 10.4% |     | 10.4%                         | 10.4% | 10.4% |     |
| <b>No-Build Volumes</b>                               | 2                | 1845  | 21    | 1868 | 17               | 1147  | 0     | 1164 | 0                   | 0     | 0     | 0   | 31                            | 0     | 10    | 41  |
| <b>Willow Springs Townhomes</b>                       | 0                | 0     | 9     | 9    | 3                | 0     | 0     | 3    | 0                   | 0     | 0     | 0   | 8                             | 0     | 3     | 11  |
| Lanier Tract Senior Living Residential New Trips      | 0                | 21    | 4     | 25   | 2                | 14    | 0     | 16   | 0                   | 0     | 0     | 0   | 3                             | 0     | 2     | 5   |
| Lanier Tract Office/Retail New Trips                  | 24               | 10    | 0     | 34   | 0                | 5     | 0     | 5    | 0                   | 0     | 0     | 0   | 0                             | 0     | 0     | 0   |
| <b>Total Lanier Tract Site Trips</b>                  | 24               | 31    | 4     | 59   | 2                | 19    | 0     | 21   | 0                   | 0     | 0     | 0   | 3                             | 0     | 2     | 5   |
| <b>Phase 1 Future Volumes</b>                         | 26               | 1876  | 34    | 1936 | 22               | 1166  | 0     | 1188 | 0                   | 0     | 0     | 0   | 42                            | 0     | 15    | 57  |
| Retail Outparcels                                     | 0                | 38    | 0     | 38   | 0                | 35    | 0     | 35   | 0                   | 0     | 0     | 0   | 0                             | 0     | 0     | 0   |
| <b>Phase 2 Future Volumes</b>                         | 26               | 1914  | 34    | 1974 | 22               | 1201  | 0     | 1223 | 0                   | 0     | 0     | 0   | 42                            | 0     | 15    | 57  |

**MARC R. ACAMPORA, PE, LLC**

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**Intersection 3: Georgia State Route 53 at Avonlea Way**

| Weekday A.M. Peak Hour                               | Northbound GA 53 |            |          |            | Southbound GA 53 |             |          |             | Eastbound Avonlea Way |          |           |           | Westbound Lanier Tract Access |          |           |           |
|------------------------------------------------------|------------------|------------|----------|------------|------------------|-------------|----------|-------------|-----------------------|----------|-----------|-----------|-------------------------------|----------|-----------|-----------|
|                                                      | L                | T          | R        | Tot        | L                | T           | R        | Tot         | L                     | T        | R         | Tot       | L                             | T        | R         | Tot       |
| <b>Counted Volumes (Thursday, November 17, 2016)</b> | 12               | 757        | 1        | 770        | 0                | 1668        | 6        | 1674        | 15                    | 0        | 72        | 87        | 0                             | 0        | 0         | 0         |
| Annual Background Growth                             | 10.4%            | 10.4%      | 10.4%    |            | 10.4%            | 10.4%       | 10.4%    |             | 10.4%                 | 10.4%    | 10.4%     |           | 10.4%                         | 10.4%    | 10.4%     |           |
| <b>No-Build Volumes</b>                              | <b>13</b>        | <b>836</b> | <b>1</b> | <b>850</b> | <b>0</b>         | <b>1842</b> | <b>7</b> | <b>1848</b> | <b>17</b>             | <b>0</b> | <b>79</b> | <b>96</b> | <b>0</b>                      | <b>0</b> | <b>0</b>  | <b>0</b>  |
| <b>Willow Springs Townhomes</b>                      | <b>0</b>         | <b>4</b>   | <b>0</b> | <b>4</b>   | <b>0</b>         | <b>9</b>    | <b>0</b> | <b>9</b>    | <b>0</b>              | <b>0</b> | <b>0</b>  | <b>0</b>  | <b>0</b>                      | <b>0</b> | <b>0</b>  | <b>0</b>  |
| Lanier Tract Senior Living Residential New Trips     | 0                | 9          | 1        | 10         | 8                | 11          | 0        | 19          | 0                     | 0        | 0         | 0         | 2                             | 0        | 13        | 15        |
| Lanier Tract Office/Retail New Trips                 | 0                | 17         | 0        | 17         | 7                | 5           | 0        | 12          | 0                     | 0        | 0         | 0         | 0                             | 0        | 0         | 0         |
| <b>Total Lanier Tract Site Trips</b>                 | <b>0</b>         | <b>26</b>  | <b>1</b> | <b>27</b>  | <b>15</b>        | <b>16</b>   | <b>0</b> | <b>31</b>   | <b>0</b>              | <b>0</b> | <b>0</b>  | <b>0</b>  | <b>2</b>                      | <b>0</b> | <b>13</b> | <b>15</b> |
| <b>Phase 1 Future Volumes</b>                        | <b>13</b>        | <b>866</b> | <b>2</b> | <b>881</b> | <b>15</b>        | <b>1867</b> | <b>7</b> | <b>1888</b> | <b>17</b>             | <b>0</b> | <b>79</b> | <b>96</b> | <b>2</b>                      | <b>0</b> | <b>13</b> | <b>15</b> |
| Retail Outparcels                                    | 0                | 9          | 0        | 9          | 0                | 14          | 0        | 14          | 0                     | 0        | 0         | 0         | 0                             | 0        | 0         | 0         |
| <b>Phase 2 Future Volumes</b>                        | <b>13</b>        | <b>875</b> | <b>2</b> | <b>890</b> | <b>15</b>        | <b>1881</b> | <b>7</b> | <b>1902</b> | <b>17</b>             | <b>0</b> | <b>79</b> | <b>96</b> | <b>2</b>                      | <b>0</b> | <b>13</b> | <b>15</b> |

| Weekday P.M. Peak Hour                                | Northbound GA 53 |             |           |             | Southbound GA 53 |             |           |             | Eastbound Avonlea Way |          |           |           | Westbound Lanier Tract Access |          |           |           |
|-------------------------------------------------------|------------------|-------------|-----------|-------------|------------------|-------------|-----------|-------------|-----------------------|----------|-----------|-----------|-------------------------------|----------|-----------|-----------|
|                                                       | L                | T           | R         | Tot         | L                | T           | R         | Tot         | L                     | T        | R         | Tot       | L                             | T        | R         | Tot       |
| <b>Counted Volumes (Thursday, September 17, 2015)</b> | 62               | 1650        | 0         | 1712        | 2                | 1102        | 14        | 1118        | 11                    | 0        | 47        | 58        | 0                             | 0        | 0         | 0         |
| Annual Background Growth                              | 10.4%            | 10.4%       | 10.4%     |             | 10.4%            | 10.4%       | 10.4%     |             | 10.4%                 | 10.4%    | 10.4%     |           | 10.4%                         | 10.4%    | 10.4%     |           |
| <b>No-Build Volumes</b>                               | <b>68</b>        | <b>1822</b> | <b>0</b>  | <b>1890</b> | <b>2</b>         | <b>1217</b> | <b>15</b> | <b>1234</b> | <b>12</b>             | <b>0</b> | <b>52</b> | <b>64</b> | <b>0</b>                      | <b>0</b> | <b>0</b>  | <b>0</b>  |
| <b>Willow Springs Townhomes</b>                       | <b>0</b>         | <b>9</b>    | <b>0</b>  | <b>9</b>    | <b>0</b>         | <b>8</b>    | <b>0</b>  | <b>8</b>    | <b>0</b>              | <b>0</b> | <b>0</b>  | <b>0</b>  | <b>0</b>                      | <b>0</b> | <b>0</b>  | <b>0</b>  |
| Lanier Tract Senior Living Residential New Trips      | 0                | 14          | 17        | 31          | 3                | 14          | 0         | 17          | 0                     | 0        | 0         | 0         | 2                             | 0        | 11        | 13        |
| Lanier Tract Office/Retail New Trips                  | 0                | 13          | 0         | 13          | 5                | 24          | 0         | 29          | 0                     | 0        | 0         | 0         | 0                             | 0        | 0         | 0         |
| <b>Total Lanier Tract Site Trips</b>                  | <b>0</b>         | <b>27</b>   | <b>17</b> | <b>44</b>   | <b>8</b>         | <b>38</b>   | <b>0</b>  | <b>46</b>   | <b>0</b>              | <b>0</b> | <b>0</b>  | <b>0</b>  | <b>2</b>                      | <b>0</b> | <b>11</b> | <b>13</b> |
| <b>Phase 1 Future Volumes</b>                         | <b>68</b>        | <b>1858</b> | <b>17</b> | <b>1943</b> | <b>10</b>        | <b>1263</b> | <b>15</b> | <b>1288</b> | <b>12</b>             | <b>0</b> | <b>52</b> | <b>64</b> | <b>2</b>                      | <b>0</b> | <b>11</b> | <b>13</b> |
| Retail Outparcels                                     | 0                | 38          | 0         | 38          | 0                | 35          | 0         | 35          | 0                     | 0        | 0         | 0         | 0                             | 0        | 0         | 0         |
| <b>Phase 2 Future Volumes</b>                         | <b>68</b>        | <b>1896</b> | <b>17</b> | <b>1981</b> | <b>10</b>        | <b>1298</b> | <b>15</b> | <b>1323</b> | <b>12</b>             | <b>0</b> | <b>52</b> | <b>64</b> | <b>2</b>                      | <b>0</b> | <b>11</b> | <b>13</b> |

**MARC R. ACAMPORA, PE, LLC**



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**Intersection 4: Georgia State Route 53 at Canterbury Road**

| Weekday A.M. Peak Hour                               | Northbound GA 53 |            |           |            | Southbound GA 53 |             |          |             | Eastbound Canterbury Road |          |            |            | Westbound Lanier Tract Access |          |           |           |
|------------------------------------------------------|------------------|------------|-----------|------------|------------------|-------------|----------|-------------|---------------------------|----------|------------|------------|-------------------------------|----------|-----------|-----------|
|                                                      | L                | T          | R         | Tot        | L                | T           | R        | Tot         | L                         | T        | R          | Tot        | L                             | T        | R         | Tot       |
| <b>Counted Volumes (Thursday, November 17, 2016)</b> | 23               | 722        |           | 745        |                  | 1783        | 7        | 1790        | 18                        |          | 95         | 113        |                               |          |           |           |
| Annual Background Growth                             | 10.4%            | 10.4%      |           |            |                  | 10.4%       | 10.4%    |             | 10.4%                     |          | 10.4%      |            |                               |          |           |           |
| <b>No-Build Volumes</b>                              | <b>25</b>        | <b>797</b> |           | <b>823</b> |                  | <b>1969</b> | <b>8</b> | <b>1976</b> | <b>20</b>                 |          | <b>105</b> | <b>125</b> |                               |          |           |           |
| <b>Willow Springs Townhomes</b>                      | <b>0</b>         | <b>4</b>   | <b>0</b>  | <b>4</b>   | <b>0</b>         | <b>9</b>    | <b>0</b> | <b>9</b>    | <b>0</b>                  | <b>0</b> | <b>0</b>   | <b>0</b>   | <b>0</b>                      | <b>0</b> | <b>0</b>  | <b>0</b>  |
| Lanier Tract Senior Living Residential New Trips     | 0                | 8          | 3         | 11         | 2                | 11          | 0        | 13          | 0                         | 0        | 0          | 0          | 3                             | 0        | 2         | 5         |
| Lanier Tract Office/Retail New Trips                 | 0                | 17         | 0         | 17         | 0                | 5           | 0        | 5           | 0                         | 0        | 0          | 0          | 0                             | 0        | 0         | 0         |
| <b>Total Lanier Tract Site Trips</b>                 | <b>0</b>         | <b>25</b>  | <b>3</b>  | <b>28</b>  | <b>2</b>         | <b>16</b>   | <b>0</b> | <b>18</b>   | <b>0</b>                  | <b>0</b> | <b>0</b>   | <b>0</b>   | <b>3</b>                      | <b>0</b> | <b>2</b>  | <b>5</b>  |
| <b>Phase 1 Future Volumes</b>                        | <b>25</b>        | <b>826</b> | <b>3</b>  | <b>855</b> | <b>2</b>         | <b>1994</b> | <b>8</b> | <b>2003</b> | <b>20</b>                 | <b>0</b> | <b>105</b> | <b>125</b> | <b>3</b>                      | <b>0</b> | <b>2</b>  | <b>5</b>  |
| Retail Outparcels                                    | 0                | 0          | 31        | 31         | 14               | 0           | 0        | 0           | 0                         | 0        | 0          | 0          | 18                            | 0        | 9         | 9         |
| Retail Outparcels Pass-by                            | 0                | -6         | 6         | 0          | 14               | -14         | 0        | -14         | 0                         | 0        | 0          | 0          | 8                             | 0        | 4         | 4         |
| <b>Phase 2 Future Volumes</b>                        | <b>25</b>        | <b>820</b> | <b>40</b> | <b>886</b> | <b>30</b>        | <b>1980</b> | <b>8</b> | <b>2017</b> | <b>20</b>                 | <b>0</b> | <b>105</b> | <b>125</b> | <b>29</b>                     | <b>0</b> | <b>15</b> | <b>44</b> |

| Weekday P.M. Peak Hour                                | Northbound GA 53 |             |            |             | Southbound GA 53 |             |           |             | Eastbound Canterbury Road |          |           |           | Westbound Lanier Tract Access |          |           |            |
|-------------------------------------------------------|------------------|-------------|------------|-------------|------------------|-------------|-----------|-------------|---------------------------|----------|-----------|-----------|-------------------------------|----------|-----------|------------|
|                                                       | L                | T           | R          | Tot         | L                | T           | R         | Tot         | L                         | T        | R         | Tot       | L                             | T        | R         | Tot        |
| <b>Counted Volumes (Thursday, September 17, 2015)</b> | 111              | 1682        |            | 1793        |                  | 1108        | 14        | 1122        | 7                         |          | 28        | 35        |                               |          |           |            |
| Annual Background Growth                              | 10.4%            | 10.4%       |            |             |                  | 10.4%       | 10.4%     |             | 10.4%                     |          | 10.4%     |           |                               |          |           |            |
| <b>No-Build Volumes</b>                               | <b>123</b>       | <b>1857</b> |            | <b>1980</b> |                  | <b>1223</b> | <b>15</b> | <b>1239</b> | <b>8</b>                  |          | <b>31</b> | <b>39</b> |                               |          |           |            |
| <b>Willow Springs Townhomes</b>                       | <b>0</b>         | <b>9</b>    | <b>0</b>   | <b>9</b>    | <b>0</b>         | <b>8</b>    | <b>0</b>  | <b>8</b>    | <b>0</b>                  | <b>0</b> | <b>0</b>  | <b>0</b>  | <b>0</b>                      | <b>0</b> | <b>0</b>  | <b>0</b>   |
| Lanier Tract Senior Living Residential New Trips      | 0                | 29          | 4          | 33          | 3                | 13          | 0         | 16          | 0                         | 0        | 0         | 0         | 2                             | 0        | 2         | 4          |
| Lanier Tract Office/Retail New Trips                  | 0                | 13          | 0          | 13          | 0                | 24          | 0         | 24          | 0                         | 0        | 0         | 0         | 0                             | 0        | 0         | 0          |
| <b>Total Lanier Tract Site Trips</b>                  | <b>0</b>         | <b>42</b>   | <b>4</b>   | <b>46</b>   | <b>3</b>         | <b>37</b>   | <b>0</b>  | <b>40</b>   | <b>0</b>                  | <b>0</b> | <b>0</b>  | <b>0</b>  | <b>2</b>                      | <b>0</b> | <b>2</b>  | <b>4</b>   |
| <b>Phase 1 Future Volumes</b>                         | <b>123</b>       | <b>1908</b> | <b>4</b>   | <b>2035</b> | <b>3</b>         | <b>1268</b> | <b>15</b> | <b>1287</b> | <b>8</b>                  | <b>0</b> | <b>31</b> | <b>39</b> | <b>2</b>                      | <b>0</b> | <b>2</b>  | <b>4</b>   |
| Retail Outparcels                                     | 0                | 0           | 76         | 76          | 35               | 0           | 0         | 0           | 0                         | 0        | 0         | 0         | 82                            | 0        | 38        | 38         |
| Retail Outparcels Pass-by                             | 0                | -48         | 48         | 0           | 30               | -30         | 0         | -30         | 0                         | 0        | 0         | 0         | 32                            | 0        | 52        | 52         |
| <b>Phase 2 Future Volumes</b>                         | <b>123</b>       | <b>1860</b> | <b>128</b> | <b>2111</b> | <b>68</b>        | <b>1238</b> | <b>15</b> | <b>1322</b> | <b>8</b>                  | <b>0</b> | <b>31</b> | <b>39</b> | <b>116</b>                    | <b>0</b> | <b>92</b> | <b>208</b> |

**MARC R. ACAMPORA, PE, LLC**

**Lanier Tract Multi-Use DRI Traffic Impact Study**  
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April 2017

**Intersection 5: Georgia State Route 53 at Lanier Valley Drive / Ahaluna Drive**

| Weekday A.M. Peak Hour                               |  | Northbound GA 53 |            |           |            | Southbound GA 53 |             |          |             | Eastbound Lanier Valley Drive |          |            |            | Westbound Ahaluna Drive |          |           |            |
|------------------------------------------------------|--|------------------|------------|-----------|------------|------------------|-------------|----------|-------------|-------------------------------|----------|------------|------------|-------------------------|----------|-----------|------------|
|                                                      |  | L                | T          | R         | Tot        | L                | T           | R        | Tot         | L                             | T        | R          | Tot        | L                       | T        | R         | Tot        |
| <b>Counted Volumes (Thursday, November 17, 2016)</b> |  | 55               | 701        | 11        | 767        | 14               | 1901        | 0        | 1915        | 19                            | 5        | 115        | 139        | 37                      | 3        | 20        | 60         |
| Annual Background Growth                             |  | 10.4%            | 10.4%      | 10.4%     |            | 10.4%            | 10.4%       | 10.4%    |             | 10.4%                         | 10.4%    | 10.4%      |            | 10.4%                   | 10.4%    | 10.4%     |            |
| <b>No-Build Volumes</b>                              |  | <b>61</b>        | <b>774</b> | <b>12</b> | <b>847</b> | <b>15</b>        | <b>2099</b> | <b>0</b> | <b>2114</b> | <b>21</b>                     | <b>6</b> | <b>127</b> | <b>153</b> | <b>41</b>               | <b>3</b> | <b>22</b> | <b>66</b>  |
| <b>Willow Springs Townhomes</b>                      |  | <b>0</b>         | <b>4</b>   | <b>0</b>  | <b>4</b>   | <b>0</b>         | <b>9</b>    | <b>0</b> | <b>9</b>    | <b>0</b>                      | <b>0</b> | <b>0</b>   | <b>0</b>   | <b>0</b>                | <b>0</b> | <b>0</b>  | <b>0</b>   |
| Lanier Tract Senior Living Residential New Trips     |  | 0                | 5          | 35        | 40         | 6                | 8           | 0        | 14          | 0                             | 0        | 0          | 0          | 51                      | 0        | 5         | 56         |
| Lanier Tract Office/Retail New Trips                 |  | 0                | 17         | 0         | 17         | 0                | 5           | 0        | 5           | 0                             | 0        | 0          | 0          | 0                       | 0        | 0         | 0          |
| <b>Total Lanier Tract Site Trips</b>                 |  | <b>0</b>         | <b>22</b>  | <b>35</b> | <b>57</b>  | <b>6</b>         | <b>13</b>   | <b>0</b> | <b>19</b>   | <b>0</b>                      | <b>0</b> | <b>0</b>   | <b>0</b>   | <b>51</b>               | <b>0</b> | <b>5</b>  | <b>56</b>  |
| <b>Phase 1 Future Volumes</b>                        |  | <b>61</b>        | <b>800</b> | <b>47</b> | <b>908</b> | <b>21</b>        | <b>2121</b> | <b>0</b> | <b>2142</b> | <b>21</b>                     | <b>6</b> | <b>127</b> | <b>153</b> | <b>92</b>               | <b>3</b> | <b>27</b> | <b>122</b> |
| Retail Outparcels                                    |  | 0                | 31         | 0         | 31         | 0                | 18          | 0        | 18          | 0                             | 0        | 0          | 0          | 0                       | 0        | 0         | 0          |
| <b>Phase 2 Future Volumes</b>                        |  | <b>61</b>        | <b>831</b> | <b>47</b> | <b>939</b> | <b>21</b>        | <b>2139</b> | <b>0</b> | <b>2160</b> | <b>21</b>                     | <b>6</b> | <b>127</b> | <b>153</b> | <b>92</b>               | <b>3</b> | <b>27</b> | <b>122</b> |

| Weekday P.M. Peak Hour                                |  | Northbound GA 53 |             |            |             | Southbound GA 53 |             |          |             | Eastbound Lanier Valley Drive |          |            |            | Westbound Ahaluna Drive |          |           |            |
|-------------------------------------------------------|--|------------------|-------------|------------|-------------|------------------|-------------|----------|-------------|-------------------------------|----------|------------|------------|-------------------------|----------|-----------|------------|
|                                                       |  | L                | T           | R          | Tot         | L                | T           | R        | Tot         | L                             | T        | R          | Tot        | L                       | T        | R         | Tot        |
| <b>Counted Volumes (Thursday, September 17, 2015)</b> |  | 179              | 1737        | 38         | 1954        | 22               | 1201        | 3        | 1226        | 21                            | 1        | 96         | 118        | 37                      | 7        | 51        | 95         |
| Annual Background Growth                              |  | 10.4%            | 10.4%       | 10.4%      |             | 10.4%            | 10.4%       | 10.4%    |             | 10.4%                         | 10.4%    | 10.4%      |            | 10.4%                   | 10.4%    | 10.4%     |            |
| <b>No-Build Volumes</b>                               |  | <b>198</b>       | <b>1918</b> | <b>42</b>  | <b>2157</b> | <b>24</b>        | <b>1326</b> | <b>3</b> | <b>1354</b> | <b>23</b>                     | <b>1</b> | <b>106</b> | <b>130</b> | <b>41</b>               | <b>8</b> | <b>56</b> | <b>105</b> |
| <b>Willow Springs Townhomes</b>                       |  | <b>0</b>         | <b>9</b>    | <b>0</b>   | <b>9</b>    | <b>0</b>         | <b>8</b>    | <b>0</b> | <b>8</b>    | <b>0</b>                      | <b>0</b> | <b>0</b>   | <b>0</b>   | <b>0</b>                | <b>0</b> | <b>0</b>  | <b>0</b>   |
| Lanier Tract Senior Living Residential New Trips      |  | 0                | 25          | 72         | 97          | 7                | 8           | 0        | 15          | 0                             | 0        | 0          | 0          | 57                      | 0        | 8         | 65         |
| Lanier Tract Office/Retail New Trips                  |  | 0                | 13          | 0          | 13          | 0                | 24          | 0        | 24          | 0                             | 0        | 0          | 0          | 0                       | 0        | 0         | 0          |
| <b>Total Lanier Tract Site Trips</b>                  |  | <b>0</b>         | <b>38</b>   | <b>72</b>  | <b>110</b>  | <b>7</b>         | <b>32</b>   | <b>0</b> | <b>39</b>   | <b>0</b>                      | <b>0</b> | <b>0</b>   | <b>0</b>   | <b>57</b>               | <b>0</b> | <b>8</b>  | <b>65</b>  |
| <b>Phase 1 Future Volumes</b>                         |  | <b>198</b>       | <b>1965</b> | <b>114</b> | <b>2276</b> | <b>31</b>        | <b>1366</b> | <b>3</b> | <b>1401</b> | <b>23</b>                     | <b>1</b> | <b>106</b> | <b>130</b> | <b>98</b>               | <b>8</b> | <b>64</b> | <b>170</b> |
| Retail Outparcels                                     |  | 0                | 76          | 0          | 76          | 0                | 82          | 0        | 82          | 0                             | 0        | 0          | 0          | 0                       | 0        | 0         | 0          |
| <b>Phase 2 Future Volumes</b>                         |  | <b>198</b>       | <b>2041</b> | <b>114</b> | <b>2352</b> | <b>31</b>        | <b>1448</b> | <b>3</b> | <b>1483</b> | <b>23</b>                     | <b>1</b> | <b>106</b> | <b>130</b> | <b>98</b>               | <b>8</b> | <b>64</b> | <b>170</b> |

**MARC R. ACAMPORA, PE, LLC**

**Lanier Tract Multi-Use DRI Traffic Impact Study**  
City of Gainesville, Georgia

April 2017

**Intersection 6: Georgia State Route 53 at North Lake Square / Olive Garden Access**

| Weekday A.M. Peak Hour                             | Northbound GA 53 |            |           |            | Southbound GA 53 |             |          |             | Eastbound Olive Garden Access |          |          |          | Westbound North Lake Square |          |          |          |
|----------------------------------------------------|------------------|------------|-----------|------------|------------------|-------------|----------|-------------|-------------------------------|----------|----------|----------|-----------------------------|----------|----------|----------|
|                                                    | L                | T          | R         | Tot        | L                | T           | R        | Tot         | L                             | T        | R        | Tot      | L                           | T        | R        | Tot      |
| <b>Counted Volumes (Wednesday, March 22, 2017)</b> | 11               | 740        | 9         | 760        | 5                | 1989        | 4        | 1998        | 2                             | 0        | 6        | 8        | 2                           | 0        | 0        | 2        |
| Annual Background Growth                           | 10.4%            | 10.4%      | 10.4%     |            | 10.4%            | 10.4%       | 10.4%    |             | 10.4%                         | 10.4%    | 10.4%    |          | 10.4%                       | 10.4%    | 10.4%    |          |
| <b>No-Build Volumes</b>                            | <b>12</b>        | <b>817</b> | <b>10</b> | <b>839</b> | <b>6</b>         | <b>2196</b> | <b>4</b> | <b>2206</b> | <b>2</b>                      | <b>0</b> | <b>7</b> | <b>9</b> | <b>2</b>                    | <b>0</b> | <b>0</b> | <b>2</b> |
| <b>Willow Springs Townhomes</b>                    | <b>0</b>         | <b>4</b>   | <b>0</b>  | <b>4</b>   | <b>0</b>         | <b>9</b>    | <b>0</b> | <b>9</b>    | <b>0</b>                      | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b>                    | <b>0</b> | <b>0</b> | <b>0</b> |
| Lanier Tract Senior Living Residential New Trips   | 0                | 40         | 0         | 40         | 0                | 59          | 0        | 59          | 0                             | 0        | 0        | 0        | 0                           | 0        | 0        | 0        |
| Lanier Tract Office/Retail New Trips               | 0                | 17         | 0         | 17         | 0                | 5           | 0        | 5           | 0                             | 0        | 0        | 0        | 0                           | 0        | 0        | 0        |
| <b>Total Lanier Tract Site Trips</b>               | <b>0</b>         | <b>57</b>  | <b>0</b>  | <b>57</b>  | <b>0</b>         | <b>64</b>   | <b>0</b> | <b>64</b>   | <b>0</b>                      | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b>                    | <b>0</b> | <b>0</b> | <b>0</b> |
| <b>Phase 1 Future Volumes</b>                      | <b>12</b>        | <b>878</b> | <b>10</b> | <b>900</b> | <b>6</b>         | <b>2269</b> | <b>4</b> | <b>2279</b> | <b>2</b>                      | <b>0</b> | <b>7</b> | <b>9</b> | <b>2</b>                    | <b>0</b> | <b>0</b> | <b>2</b> |
| Retail Outparcels                                  | 0                | 31         | 0         | 31         | 0                | 18          | 0        | 18          | 0                             | 0        | 0        | 0        | 0                           | 0        | 0        | 0        |
| <b>Phase 2 Future Volumes</b>                      | <b>12</b>        | <b>909</b> | <b>10</b> | <b>931</b> | <b>6</b>         | <b>2287</b> | <b>4</b> | <b>2297</b> | <b>2</b>                      | <b>0</b> | <b>7</b> | <b>9</b> | <b>2</b>                    | <b>0</b> | <b>0</b> | <b>2</b> |

| Weekday P.M. Peak Hour                             | Northbound GA 53 |             |            |             | Southbound GA 53 |             |           |             | Eastbound Olive Garden Access |          |           |           | Westbound North Lake Square |          |           |            |
|----------------------------------------------------|------------------|-------------|------------|-------------|------------------|-------------|-----------|-------------|-------------------------------|----------|-----------|-----------|-----------------------------|----------|-----------|------------|
|                                                    | L                | T           | R          | Tot         | L                | T           | R         | Tot         | L                             | T        | R         | Tot       | L                           | T        | R         | Tot        |
| <b>Counted Volumes (Wednesday, March 22, 2017)</b> | 87               | 1763        | 138        | 1988        | 19               | 1199        | 27        | 1245        | 13                            | 3        | 60        | 76        | 118                         | 7        | 42        | 167        |
| Annual Background Growth                           | 10.4%            | 10.4%       | 10.4%      |             | 10.4%            | 10.4%       | 10.4%     |             | 10.4%                         | 10.4%    | 10.4%     |           | 10.4%                       | 10.4%    | 10.4%     |            |
| <b>No-Build Volumes</b>                            | <b>96</b>        | <b>1947</b> | <b>152</b> | <b>2195</b> | <b>21</b>        | <b>1324</b> | <b>30</b> | <b>1375</b> | <b>14</b>                     | <b>3</b> | <b>66</b> | <b>84</b> | <b>130</b>                  | <b>8</b> | <b>46</b> | <b>184</b> |
| <b>Willow Springs Townhomes</b>                    | <b>0</b>         | <b>9</b>    | <b>0</b>   | <b>9</b>    | <b>0</b>         | <b>8</b>    | <b>0</b>  | <b>8</b>    | <b>0</b>                      | <b>0</b> | <b>0</b>  | <b>0</b>  | <b>0</b>                    | <b>0</b> | <b>0</b>  | <b>0</b>   |
| Lanier Tract Senior Living Residential New Trips   | 0                | 97          | 0          | 97          | 0                | 65          | 0         | 65          | 0                             | 0        | 0         | 0         | 0                           | 0        | 0         | 0          |
| Lanier Tract Office/Retail New Trips               | 0                | 13          | 0          | 13          | 0                | 24          | 0         | 24          | 0                             | 0        | 0         | 0         | 0                           | 0        | 0         | 0          |
| <b>Total Lanier Tract Site Trips</b>               | <b>0</b>         | <b>110</b>  | <b>0</b>   | <b>110</b>  | <b>0</b>         | <b>89</b>   | <b>0</b>  | <b>89</b>   | <b>0</b>                      | <b>0</b> | <b>0</b>  | <b>0</b>  | <b>0</b>                    | <b>0</b> | <b>0</b>  | <b>0</b>   |
| <b>Phase 1 Future Volumes</b>                      | <b>96</b>        | <b>2066</b> | <b>152</b> | <b>2314</b> | <b>21</b>        | <b>1421</b> | <b>30</b> | <b>1472</b> | <b>14</b>                     | <b>3</b> | <b>66</b> | <b>84</b> | <b>130</b>                  | <b>8</b> | <b>46</b> | <b>184</b> |
| Retail Outparcels                                  | 0                | 76          | 0          | 76          | 0                | 82          | 0         | 82          | 0                             | 0        | 0         | 0         | 0                           | 0        | 0         | 0          |
| <b>Phase 2 Future Volumes</b>                      | <b>96</b>        | <b>2142</b> | <b>152</b> | <b>2390</b> | <b>21</b>        | <b>1503</b> | <b>30</b> | <b>1554</b> | <b>14</b>                     | <b>3</b> | <b>66</b> | <b>84</b> | <b>130</b>                  | <b>8</b> | <b>46</b> | <b>184</b> |

**MARC R. ACAMPORA, PE, LLC**

**Lanier Tract Multi-Use DRI Traffic Impact Study**  
City of Gainesville, Georgia

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**Intersection 7: Georgia State Route 53 at Beechwood Boulevard**

| Weekday A.M. Peak Hour                               | Northbound GA 53 |            |            | Southbound GA 53 |          |             | Eastbound Beechwood Boulevard |           |           |  |
|------------------------------------------------------|------------------|------------|------------|------------------|----------|-------------|-------------------------------|-----------|-----------|--|
|                                                      | L                | T          | Tot        | T                | R        | Tot         | L                             | R         | Tot       |  |
| <b>Counted Volumes (Thursday, November 17, 2016)</b> | 27               | 787        | 814        | 2006             | 2        | 2008        | 5                             | 41        | 46        |  |
| Annual Background Growth                             | 10.4%            | 10.4%      |            | 10.4%            | 10.4%    |             | 10.4%                         | 10.4%     |           |  |
| <b>No-Build Volumes</b>                              | <b>30</b>        | <b>869</b> | <b>899</b> | <b>2215</b>      | <b>2</b> | <b>2217</b> | <b>6</b>                      | <b>45</b> | <b>51</b> |  |
| <b>Willow Springs Townhomes</b>                      | <b>0</b>         | <b>4</b>   | <b>4</b>   | <b>9</b>         | <b>0</b> | <b>9</b>    | <b>0</b>                      | <b>0</b>  | <b>0</b>  |  |
| Lanier Tract Senior Living Residential New Trips     | 0                | 40         | 40         | 59               | 0        | 59          | 0                             | 0         | 0         |  |
| Lanier Tract Office/Retail New Trips                 | 0                | 17         | 17         | 5                | 0        | 5           | 0                             | 0         | 0         |  |
| <b>Total Lanier Tract Site Trips</b>                 | <b>0</b>         | <b>57</b>  | <b>57</b>  | <b>64</b>        | <b>0</b> | <b>64</b>   | <b>0</b>                      | <b>0</b>  | <b>0</b>  |  |
| <b>Phase 1 Future Volumes</b>                        | <b>30</b>        | <b>930</b> | <b>960</b> | <b>2288</b>      | <b>2</b> | <b>2290</b> | <b>6</b>                      | <b>45</b> | <b>51</b> |  |
| Retail Outparcels                                    | 0                | 31         | 31         | 18               | 0        | 18          | 0                             | 0         | 0         |  |
| <b>Phase 2 Future Volumes</b>                        | <b>30</b>        | <b>961</b> | <b>991</b> | <b>2306</b>      | <b>2</b> | <b>2308</b> | <b>6</b>                      | <b>45</b> | <b>51</b> |  |

| Weekday P.M. Peak Hour                                | Northbound GA 53 |             |             | Southbound GA 53 |           |             | Eastbound Beechwood Boulevard |           |           |  |
|-------------------------------------------------------|------------------|-------------|-------------|------------------|-----------|-------------|-------------------------------|-----------|-----------|--|
|                                                       | L                | T           | Tot         | T                | R         | Tot         | L                             | R         | Tot       |  |
| <b>Counted Volumes (Thursday, September 17, 2015)</b> | 86               | 1998        | 2084        | 1388             | 9         | 1397        | 1                             | 47        | 48        |  |
| Annual Background Growth                              | 10.4%            | 10.4%       |             | 10.4%            | 10.4%     |             | 10.4%                         | 10.4%     |           |  |
| <b>No-Build Volumes</b>                               | <b>95</b>        | <b>2206</b> | <b>2301</b> | <b>1532</b>      | <b>10</b> | <b>1542</b> | <b>1</b>                      | <b>52</b> | <b>53</b> |  |
| <b>Willow Springs Townhomes</b>                       | <b>0</b>         | <b>9</b>    | <b>9</b>    | <b>8</b>         | <b>0</b>  | <b>8</b>    | <b>0</b>                      | <b>0</b>  | <b>0</b>  |  |
| Lanier Tract Senior Living Residential New Trips      | 0                | 97          | 97          | 65               | 0         | 65          | 0                             | 0         | 0         |  |
| Lanier Tract Office/Retail New Trips                  | 0                | 13          | 13          | 24               | 0         | 24          | 0                             | 0         | 0         |  |
| <b>Total Lanier Tract Site Trips</b>                  | <b>0</b>         | <b>110</b>  | <b>110</b>  | <b>89</b>        | <b>0</b>  | <b>89</b>   | <b>0</b>                      | <b>0</b>  | <b>0</b>  |  |
| <b>Phase 1 Future Volumes</b>                         | <b>95</b>        | <b>2325</b> | <b>2420</b> | <b>1629</b>      | <b>10</b> | <b>1639</b> | <b>1</b>                      | <b>52</b> | <b>53</b> |  |
| Retail Outparcels                                     | 0                | 76          | 76          | 82               | 0         | 82          | 0                             | 0         | 0         |  |
| <b>Phase 2 Future Volumes</b>                         | <b>95</b>        | <b>2401</b> | <b>2496</b> | <b>1711</b>      | <b>10</b> | <b>1721</b> | <b>1</b>                      | <b>52</b> | <b>53</b> |  |

**MARC R. ACAMPORA, PE, LLC**

**Lanier Tract Multi-Use DRI Traffic Impact Study**  
City of Gainesville, Georgia

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**Intersection 8: Georgia State Route 53 - Dawsonville Highway at McEver Road / Commercial Access**

| Weekday A.M. Peak Hour                               | Northbound Dawsonville Highway |            |           |            | Southbound Dawsonville Highway |             |            |             | Eastbound McEver Road |           |            |            | Westbound Commercial Access |           |           |           |
|------------------------------------------------------|--------------------------------|------------|-----------|------------|--------------------------------|-------------|------------|-------------|-----------------------|-----------|------------|------------|-----------------------------|-----------|-----------|-----------|
|                                                      | L                              | T          | R         | Tot        | L                              | T           | R          | Tot         | L                     | T         | R          | Tot        | L                           | T         | R         | Tot       |
| <b>Counted Volumes (Thursday, November 17, 2016)</b> | 282                            | 465        | 55        | 802        | 28                             | 1170        | 828        | 2026        | 390                   | 28        | 342        | 760        | 42                          | 19        | 18        | 79        |
| Annual Background Growth                             | 10.4%                          | 10.4%      | 10.4%     |            | 10.4%                          | 10.4%       | 10.4%      |             | 10.4%                 | 10.4%     | 10.4%      |            | 10.4%                       | 10.4%     | 10.4%     |           |
| <b>No-Build Volumes</b>                              | <b>311</b>                     | <b>513</b> | <b>61</b> | <b>885</b> | <b>31</b>                      | <b>1292</b> | <b>914</b> | <b>2237</b> | <b>431</b>            | <b>31</b> | <b>378</b> | <b>839</b> | <b>46</b>                   | <b>21</b> | <b>20</b> | <b>87</b> |
| <b>Willow Springs Townhomes</b>                      | <b>0</b>                       | <b>3</b>   | <b>0</b>  | <b>3</b>   | <b>0</b>                       | <b>6</b>    | <b>3</b>   | <b>9</b>    | <b>1</b>              | <b>0</b>  | <b>0</b>   | <b>1</b>   | <b>0</b>                    | <b>0</b>  | <b>0</b>  | <b>0</b>  |
| Lanier Tract Senior Living Residential New Trips     | 0                              | 27         | 0         | 27         | 3                              | 40          | 16         | 59          | 11                    | 0         | 0          | 11         | 0                           | 0         | 2         | 2         |
| Lanier Tract Office/Retail New Trips                 | 0                              | 10         | 0         | 10         | 0                              | 3           | 2          | 5           | 7                     | 0         | 0          | 7          | 0                           | 0         | 0         | 0         |
| <b>Total Lanier Tract Site Trips</b>                 | <b>0</b>                       | <b>37</b>  | <b>0</b>  | <b>37</b>  | <b>3</b>                       | <b>43</b>   | <b>18</b>  | <b>64</b>   | <b>18</b>             | <b>0</b>  | <b>0</b>   | <b>18</b>  | <b>0</b>                    | <b>0</b>  | <b>2</b>  | <b>2</b>  |
| <b>Phase 1 Future Volumes</b>                        | <b>311</b>                     | <b>553</b> | <b>61</b> | <b>925</b> | <b>34</b>                      | <b>1341</b> | <b>935</b> | <b>2310</b> | <b>450</b>            | <b>31</b> | <b>378</b> | <b>858</b> | <b>46</b>                   | <b>21</b> | <b>22</b> | <b>89</b> |
| Retail Outparcels                                    | 0                              | 19         | 0         | 19         | 0                              | 11          | 7          | 18          | 12                    | 0         | 0          | 0          | 0                           | 0         | 0         | 0         |
| <b>Phase 2 Future Volumes</b>                        | <b>311</b>                     | <b>572</b> | <b>61</b> | <b>944</b> | <b>34</b>                      | <b>1352</b> | <b>942</b> | <b>2328</b> | <b>462</b>            | <b>31</b> | <b>378</b> | <b>870</b> | <b>46</b>                   | <b>21</b> | <b>22</b> | <b>89</b> |

| Weekday P.M. Peak Hour                                | Northbound Dawsonville Highway |             |           |             | Southbound Dawsonville Highway |             |            |             | Eastbound McEver Road |            |            |             | Westbound Commercial Access |            |           |            |
|-------------------------------------------------------|--------------------------------|-------------|-----------|-------------|--------------------------------|-------------|------------|-------------|-----------------------|------------|------------|-------------|-----------------------------|------------|-----------|------------|
|                                                       | L                              | T           | R         | Tot         | L                              | T           | R          | Tot         | L                     | T          | R          | Tot         | L                           | T          | R         | Tot        |
| <b>Counted Volumes (Thursday, September 17, 2015)</b> | 433                            | 1362        | 46        | 1841        | 62                             | 1029        | 481        | 1572        | 845                   | 213        | 386        | 1444        | 87                          | 91         | 81        | 259        |
| Annual Background Growth                              | 10.4%                          | 10.4%       | 10.4%     |             | 10.4%                          | 10.4%       | 10.4%      |             | 10.4%                 | 10.4%      | 10.4%      |             | 10.4%                       | 10.4%      | 10.4%     |            |
| <b>No-Build Volumes</b>                               | <b>478</b>                     | <b>1504</b> | <b>51</b> | <b>2033</b> | <b>68</b>                      | <b>1136</b> | <b>531</b> | <b>1736</b> | <b>933</b>            | <b>235</b> | <b>426</b> | <b>1594</b> | <b>96</b>                   | <b>100</b> | <b>89</b> | <b>286</b> |
| <b>Willow Springs Townhomes</b>                       | <b>0</b>                       | <b>6</b>    | <b>0</b>  | <b>6</b>    | <b>0</b>                       | <b>5</b>    | <b>3</b>   | <b>8</b>    | <b>3</b>              | <b>0</b>   | <b>0</b>   | <b>3</b>    | <b>0</b>                    | <b>0</b>   | <b>0</b>  | <b>0</b>   |
| Lanier Tract Senior Living Residential New Trips      | 0                              | 67          | 0         | 67          | 3                              | 44          | 18         | 65          | 26                    | 0          | 0          | 26          | 0                           | 0          | 4         | 4          |
| Lanier Tract Office/Retail New Trips                  | 0                              | 8           | 0         | 8           | 0                              | 14          | 10         | 24          | 5                     | 0          | 0          | 5           | 0                           | 0          | 0         | 0          |
| <b>Total Lanier Tract Site Trips</b>                  | <b>0</b>                       | <b>75</b>   | <b>0</b>  | <b>75</b>   | <b>3</b>                       | <b>58</b>   | <b>28</b>  | <b>89</b>   | <b>31</b>             | <b>0</b>   | <b>0</b>   | <b>31</b>   | <b>0</b>                    | <b>0</b>   | <b>4</b>  | <b>4</b>   |
| <b>Phase 1 Future Volumes</b>                         | <b>478</b>                     | <b>1585</b> | <b>51</b> | <b>2114</b> | <b>71</b>                      | <b>1199</b> | <b>562</b> | <b>1833</b> | <b>967</b>            | <b>235</b> | <b>426</b> | <b>1628</b> | <b>96</b>                   | <b>100</b> | <b>93</b> | <b>290</b> |
| Retail Outparcels                                     | 0                              | 47          | 0         | 47          | 0                              | 50          | 32         | 82          | 29                    | 0          | 0          | 0           | 0                           | 0          | 0         | 0          |
| <b>Phase 2 Future Volumes</b>                         | <b>478</b>                     | <b>1632</b> | <b>51</b> | <b>2161</b> | <b>71</b>                      | <b>1249</b> | <b>594</b> | <b>1915</b> | <b>996</b>            | <b>235</b> | <b>426</b> | <b>1657</b> | <b>96</b>                   | <b>100</b> | <b>93</b> | <b>290</b> |

**MARC R. ACAMPORA, PE, LLC**

**Lanier Tract Multi-Use DRI Traffic Impact Study**  
City of Gainesville, Georgia

April 2017

**Intersection 9: Dawsonville Highway at Green Hill Circle / Commercial Access**

| Weekday A.M. Peak Hour                               | Northbound Dawsonville Highway |            |           |             | Southbound Dawsonville Highway |             |           |             | Eastbound Green Hill Circle |          |            |            | Westbound Commercial Access |          |          |           |
|------------------------------------------------------|--------------------------------|------------|-----------|-------------|--------------------------------|-------------|-----------|-------------|-----------------------------|----------|------------|------------|-----------------------------|----------|----------|-----------|
|                                                      | L                              | T          | R         | Tot         | L                              | T           | R         | Tot         | L                           | T        | R          | Tot        | L                           | T        | R        | Tot       |
| <b>Counted Volumes (Thursday, November 17, 2016)</b> | 135                            | 754        | 10        | 899         | 12                             | 1404        | 52        | 1468        | 67                          | 1        | 141        | 209        | 6                           | 1        | 4        | 11        |
| Annual Background Growth                             | 10.4%                          | 10.4%      | 10.4%     |             | 10.4%                          | 10.4%       | 10.4%     |             | 10.4%                       | 10.4%    | 10.4%      |            | 10.4%                       | 10.4%    | 10.4%    |           |
| <b>No-Build Volumes</b>                              | <b>149</b>                     | <b>832</b> | <b>11</b> | <b>993</b>  | <b>13</b>                      | <b>1550</b> | <b>57</b> | <b>1621</b> | <b>74</b>                   | <b>1</b> | <b>156</b> | <b>231</b> | <b>7</b>                    | <b>1</b> | <b>4</b> | <b>12</b> |
| <b>Willow Springs Townhomes</b>                      | <b>0</b>                       | <b>3</b>   | <b>0</b>  | <b>3</b>    | <b>0</b>                       | <b>6</b>    | <b>0</b>  | <b>6</b>    | <b>0</b>                    | <b>0</b> | <b>0</b>   | <b>0</b>   | <b>0</b>                    | <b>0</b> | <b>0</b> | <b>0</b>  |
| Lanier Tract Senior Living Residential New Trips     | 0                              | 27         | 0         | 27          | 0                              | 40          | 0         | 40          | 0                           | 0        | 0          | 0          | 0                           | 0        | 0        | 0         |
| Lanier Tract Office/Retail New Trips                 | 0                              | 10         | 0         | 10          | 0                              | 3           | 0         | 3           | 0                           | 0        | 0          | 0          | 0                           | 0        | 0        | 0         |
| <b>Total Lanier Tract Site Trips</b>                 | <b>0</b>                       | <b>37</b>  | <b>0</b>  | <b>37</b>   | <b>0</b>                       | <b>43</b>   | <b>0</b>  | <b>43</b>   | <b>0</b>                    | <b>0</b> | <b>0</b>   | <b>0</b>   | <b>0</b>                    | <b>0</b> | <b>0</b> | <b>0</b>  |
| <b>Phase 1 Future Volumes</b>                        | <b>149</b>                     | <b>872</b> | <b>11</b> | <b>1033</b> | <b>13</b>                      | <b>1599</b> | <b>57</b> | <b>1670</b> | <b>74</b>                   | <b>1</b> | <b>156</b> | <b>231</b> | <b>7</b>                    | <b>1</b> | <b>4</b> | <b>12</b> |
| Retail Outparcels                                    | 0                              | 19         | 0         | 19          | 0                              | 11          | 0         | 11          | 0                           | 0        | 0          | 0          | 0                           | 0        | 0        | 0         |
| <b>Phase 2 Future Volumes</b>                        | <b>149</b>                     | <b>891</b> | <b>11</b> | <b>1052</b> | <b>13</b>                      | <b>1610</b> | <b>57</b> | <b>1681</b> | <b>74</b>                   | <b>1</b> | <b>156</b> | <b>231</b> | <b>7</b>                    | <b>1</b> | <b>4</b> | <b>12</b> |

| Weekday P.M. Peak Hour                                | Northbound Dawsonville Highway |             |           |             | Southbound Dawsonville Highway |             |           |             | Eastbound Green Hill Circle |           |            |            | Westbound Commercial Access |           |           |            |
|-------------------------------------------------------|--------------------------------|-------------|-----------|-------------|--------------------------------|-------------|-----------|-------------|-----------------------------|-----------|------------|------------|-----------------------------|-----------|-----------|------------|
|                                                       | L                              | T           | R         | Tot         | L                              | T           | R         | Tot         | L                           | T         | R          | Tot        | L                           | T         | R         | Tot        |
| <b>Counted Volumes (Thursday, September 17, 2015)</b> | 248                            | 1749        | 70        | 2067        | 40                             | 1392        | 53        | 1485        | 132                         | 9         | 138        | 279        | 60                          | 20        | 38        | 118        |
| Annual Background Growth                              | 10.4%                          | 10.4%       | 10.4%     |             | 10.4%                          | 10.4%       | 10.4%     |             | 10.4%                       | 10.4%     | 10.4%      |            | 10.4%                       | 10.4%     | 10.4%     |            |
| <b>No-Build Volumes</b>                               | <b>274</b>                     | <b>1931</b> | <b>77</b> | <b>2282</b> | <b>44</b>                      | <b>1537</b> | <b>59</b> | <b>1640</b> | <b>146</b>                  | <b>10</b> | <b>152</b> | <b>308</b> | <b>66</b>                   | <b>22</b> | <b>42</b> | <b>130</b> |
| <b>Willow Springs Townhomes</b>                       | <b>0</b>                       | <b>6</b>    | <b>0</b>  | <b>6</b>    | <b>0</b>                       | <b>5</b>    | <b>0</b>  | <b>5</b>    | <b>0</b>                    | <b>0</b>  | <b>0</b>   | <b>0</b>   | <b>0</b>                    | <b>0</b>  | <b>0</b>  | <b>0</b>   |
| Lanier Tract Senior Living Residential New Trips      | 0                              | 67          | 0         | 67          | 0                              | 44          | 0         | 44          | 0                           | 0         | 0          | 0          | 0                           | 0         | 0         | 0          |
| Lanier Tract Office/Retail New Trips                  | 0                              | 8           | 0         | 8           | 0                              | 14          | 0         | 14          | 0                           | 0         | 0          | 0          | 0                           | 0         | 0         | 0          |
| <b>Total Lanier Tract Site Trips</b>                  | <b>0</b>                       | <b>75</b>   | <b>0</b>  | <b>75</b>   | <b>0</b>                       | <b>58</b>   | <b>0</b>  | <b>58</b>   | <b>0</b>                    | <b>0</b>  | <b>0</b>   | <b>0</b>   | <b>0</b>                    | <b>0</b>  | <b>0</b>  | <b>0</b>   |
| <b>Phase 1 Future Volumes</b>                         | <b>274</b>                     | <b>2012</b> | <b>77</b> | <b>2363</b> | <b>44</b>                      | <b>1600</b> | <b>59</b> | <b>1703</b> | <b>146</b>                  | <b>10</b> | <b>152</b> | <b>308</b> | <b>66</b>                   | <b>22</b> | <b>42</b> | <b>130</b> |
| Retail Outparcels                                     | 0                              | 47          | 0         | 47          | 0                              | 50          | 0         | 50          | 0                           | 0         | 0          | 0          | 0                           | 0         | 0         | 0          |
| <b>Phase 2 Future Volumes</b>                         | <b>274</b>                     | <b>2059</b> | <b>77</b> | <b>2410</b> | <b>44</b>                      | <b>1650</b> | <b>59</b> | <b>1753</b> | <b>146</b>                  | <b>10</b> | <b>152</b> | <b>308</b> | <b>66</b>                   | <b>22</b> | <b>42</b> | <b>130</b> |

**MARC R. ACAMPORA, PE, LLC**



**Lanier Tract Multi-Use DRI Traffic Impact Study**  
City of Gainesville, Georgia

April 2017

**Intersection 10: Dawsonville Highway at Shallowford Road / Commercial Access**

| Weekday A.M. Peak Hour                               | Northbound Dawsonville Highway |       |       |     | Southbound Dawsonville Highway |       |       |      | Eastbound Shallowford Road |       |       |     | Westbound Commercial Access |       |       |     |
|------------------------------------------------------|--------------------------------|-------|-------|-----|--------------------------------|-------|-------|------|----------------------------|-------|-------|-----|-----------------------------|-------|-------|-----|
|                                                      | L                              | T     | R     | Tot | L                              | T     | R     | Tot  | L                          | T     | R     | Tot | L                           | T     | R     | Tot |
| <b>Counted Volumes (Thursday, November 17, 2016)</b> | 10                             | 738   | 13    | 761 | 1                              | 1249  | 338   | 1588 | 138                        | 2     | 8     | 148 | 2                           | 4     | 3     | 9   |
| Annual Background Growth                             | 10.4%                          | 10.4% | 10.4% |     | 10.4%                          | 10.4% | 10.4% |      | 10.4%                      | 10.4% | 10.4% |     | 10.4%                       | 10.4% | 10.4% |     |
| <b>No-Build Volumes</b>                              | 11                             | 815   | 14    | 840 | 1                              | 1379  | 373   | 1753 | 152                        | 2     | 9     | 163 | 2                           | 4     | 3     | 10  |
| <b>Willow Springs Townhomes</b>                      | 0                              | 2     | 0     | 2   | 0                              | 4     | 2     | 6    | 1                          | 0     | 0     | 1   | 0                           | 0     | 0     | 0   |
| Lanier Tract Senior Living Residential New Trips     | 0                              | 21    | 0     | 21  | 0                              | 30    | 10    | 40   | 6                          | 0     | 0     | 6   | 0                           | 0     | 0     | 0   |
| Lanier Tract Office/Retail New Trips                 | 0                              | 9     | 0     | 9   | 0                              | 2     | 1     | 3    | 1                          | 0     | 0     | 1   | 0                           | 0     | 0     | 0   |
| <b>Total Lanier Tract Site Trips</b>                 | 0                              | 30    | 0     | 30  | 0                              | 32    | 11    | 43   | 7                          | 0     | 0     | 7   | 0                           | 0     | 0     | 0   |
| <b>Phase 1 Future Volumes</b>                        | 11                             | 847   | 14    | 872 | 1                              | 1415  | 386   | 1802 | 160                        | 2     | 9     | 171 | 2                           | 4     | 3     | 10  |
| Retail Outparcels                                    | 0                              | 17    | 0     | 17  | 0                              | 10    | 1     | 11   | 2                          | 0     | 0     | 0   | 0                           | 0     | 0     | 0   |
| <b>Phase 2 Future Volumes</b>                        | 11                             | 864   | 14    | 889 | 1                              | 1425  | 387   | 1813 | 162                        | 2     | 9     | 173 | 2                           | 4     | 3     | 10  |

| Weekday P.M. Peak Hour                                | Northbound Dawsonville Highway |       |       |      | Southbound Dawsonville Highway |       |       |      | Eastbound Shallowford Road |       |       |     | Westbound Commercial Access |       |       |     |
|-------------------------------------------------------|--------------------------------|-------|-------|------|--------------------------------|-------|-------|------|----------------------------|-------|-------|-----|-----------------------------|-------|-------|-----|
|                                                       | L                              | T     | R     | Tot  | L                              | T     | R     | Tot  | L                          | T     | R     | Tot | L                           | T     | R     | Tot |
| <b>Counted Volumes (Thursday, September 17, 2015)</b> | 40                             | 1639  | 114   | 1793 | 7                              | 1161  | 463   | 1631 | 518                        | 38    | 26    | 582 | 36                          | 27    | 7     | 70  |
| Annual Background Growth                              | 10.4%                          | 10.4% | 10.4% |      | 10.4%                          | 10.4% | 10.4% |      | 10.4%                      | 10.4% | 10.4% |     | 10.4%                       | 10.4% | 10.4% |     |
| <b>No-Build Volumes</b>                               | 44                             | 1810  | 126   | 1980 | 8                              | 1282  | 511   | 1801 | 572                        | 42    | 29    | 643 | 40                          | 30    | 8     | 77  |
| <b>Willow Springs Townhomes</b>                       | 0                              | 4     | 0     | 4    | 0                              | 4     | 1     | 5    | 2                          | 0     | 0     | 2   | 0                           | 0     | 0     | 0   |
| Lanier Tract Senior Living Residential New Trips      | 0                              | 52    | 0     | 52   | 0                              | 33    | 11    | 44   | 15                         | 0     | 0     | 15  | 0                           | 0     | 0     | 0   |
| Lanier Tract Office/Retail New Trips                  | 0                              | 7     | 0     | 7    | 0                              | 12    | 2     | 14   | 1                          | 0     | 0     | 1   | 0                           | 0     | 0     | 0   |
| <b>Total Lanier Tract Site Trips</b>                  | 0                              | 59    | 0     | 59   | 0                              | 45    | 13    | 58   | 16                         | 0     | 0     | 16  | 0                           | 0     | 0     | 0   |
| <b>Phase 1 Future Volumes</b>                         | 44                             | 1873  | 126   | 2043 | 8                              | 1331  | 525   | 1864 | 590                        | 42    | 29    | 661 | 40                          | 30    | 8     | 77  |
| Retail Outparcels                                     | 0                              | 41    | 0     | 41   | 0                              | 44    | 6     | 50   | 6                          | 0     | 0     | 0   | 0                           | 0     | 0     | 0   |
| <b>Phase 2 Future Volumes</b>                         | 44                             | 1914  | 126   | 2084 | 8                              | 1375  | 531   | 1914 | 596                        | 42    | 29    | 667 | 40                          | 30    | 8     | 77  |

**MARC R. ACAMPORA, PE, LLC**

# Reliable Traffic Data Services, LLC

Tel: (770) 578-8158 | Fax: (770) 578-8159  
info@reliabletraffic.org | www.reliabletraffic.org

TMC Data  
Sportsman Club Rd @ Strickland Dr  
Gainesville, GA  
7-9am I 4.30-6.30pm

File Name : 39520001  
Site Code : 39520001  
Start Date : 11/17/2016  
Page No : 1

## Groups Printed- Cars, Buses, Trucks

|               | Sportsman Club Rd Northbound |      |       |      |            | Sportsman Club Rd Southbound |      |       |      |            | Eastbound |      |       |      |            | Strickland Dr Westbound |      |       |      |            |            |
|---------------|------------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|-----------|------|-------|------|------------|-------------------------|------|-------|------|------------|------------|
| Start Time    | Left                         | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Left      | Thru | Right | Peds | App. Total | Left                    | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 0                            | 4    | 0     | 0    | 4          | 0                            | 7    | 0     | 0    | 7          | 0         | 0    | 0     | 0    | 0          | 0                       | 0    | 0     | 0    | 0          | 11         |
| 07:15 AM      | 0                            | 1    | 0     | 0    | 1          | 0                            | 4    | 0     | 0    | 4          | 0         | 0    | 0     | 0    | 0          | 1                       | 0    | 0     | 0    | 1          | 6          |
| 07:30 AM      | 0                            | 3    | 0     | 0    | 3          | 0                            | 6    | 0     | 0    | 6          | 0         | 0    | 0     | 0    | 0          | 2                       | 0    | 0     | 0    | 2          | 11         |
| 07:45 AM      | 0                            | 2    | 0     | 0    | 2          | 0                            | 3    | 0     | 0    | 3          | 0         | 0    | 0     | 0    | 0          | 2                       | 0    | 0     | 0    | 2          | 7          |
| Total         | 0                            | 10   | 0     | 0    | 10         | 0                            | 20   | 0     | 0    | 20         | 0         | 0    | 0     | 0    | 0          | 5                       | 0    | 0     | 0    | 5          | 35         |
| 08:00 AM      | 0                            | 0    | 1     | 0    | 1          | 0                            | 9    | 0     | 0    | 9          | 0         | 0    | 0     | 0    | 0          | 5                       | 0    | 0     | 0    | 5          | 15         |
| 08:15 AM      | 0                            | 1    | 0     | 0    | 1          | 0                            | 5    | 0     | 0    | 5          | 0         | 0    | 0     | 0    | 0          | 1                       | 0    | 0     | 0    | 1          | 7          |
| 08:30 AM      | 0                            | 0    | 2     | 0    | 2          | 0                            | 0    | 0     | 0    | 0          | 0         | 0    | 0     | 0    | 0          | 0                       | 0    | 0     | 0    | 0          | 2          |
| 08:45 AM      | 0                            | 2    | 3     | 0    | 5          | 0                            | 4    | 0     | 0    | 4          | 0         | 0    | 0     | 0    | 0          | 1                       | 0    | 0     | 0    | 1          | 10         |
| Total         | 0                            | 3    | 6     | 0    | 9          | 0                            | 18   | 0     | 0    | 18         | 0         | 0    | 0     | 0    | 0          | 7                       | 0    | 0     | 0    | 7          | 34         |
| *** BREAK *** |                              |      |       |      |            |                              |      |       |      |            |           |      |       |      |            |                         |      |       |      |            |            |
| 04:30 PM      | 0                            | 4    | 0     | 0    | 4          | 0                            | 4    | 0     | 0    | 4          | 0         | 0    | 0     | 0    | 0          | 0                       | 0    | 0     | 0    | 0          | 8          |
| 04:45 PM      | 0                            | 3    | 1     | 0    | 4          | 0                            | 8    | 0     | 0    | 8          | 0         | 0    | 0     | 0    | 0          | 0                       | 0    | 0     | 0    | 0          | 12         |
| Total         | 0                            | 7    | 1     | 0    | 8          | 0                            | 12   | 0     | 0    | 12         | 0         | 0    | 0     | 0    | 0          | 0                       | 0    | 0     | 0    | 0          | 20         |
| 05:00 PM      | 0                            | 6    | 1     | 0    | 7          | 0                            | 4    | 0     | 0    | 4          | 0         | 0    | 0     | 0    | 0          | 1                       | 0    | 0     | 0    | 1          | 12         |
| 05:15 PM      | 0                            | 4    | 5     | 0    | 9          | 0                            | 7    | 0     | 0    | 7          | 0         | 0    | 0     | 0    | 0          | 4                       | 0    | 0     | 0    | 4          | 20         |
| 05:30 PM      | 0                            | 10   | 1     | 0    | 11         | 0                            | 4    | 0     | 0    | 4          | 0         | 0    | 0     | 0    | 0          | 3                       | 0    | 0     | 0    | 3          | 18         |
| 05:45 PM      | 0                            | 6    | 1     | 0    | 7          | 0                            | 7    | 0     | 0    | 7          | 0         | 0    | 0     | 0    | 0          | 0                       | 0    | 0     | 0    | 0          | 14         |
| Total         | 0                            | 26   | 8     | 0    | 34         | 0                            | 22   | 0     | 0    | 22         | 0         | 0    | 0     | 0    | 0          | 8                       | 0    | 0     | 0    | 8          | 64         |
| 06:00 PM      | 0                            | 9    | 2     | 0    | 11         | 0                            | 5    | 0     | 0    | 5          | 0         | 0    | 0     | 0    | 0          | 0                       | 0    | 0     | 0    | 0          | 16         |
| 06:15 PM      | 0                            | 5    | 1     | 0    | 6          | 0                            | 6    | 0     | 0    | 6          | 0         | 0    | 0     | 0    | 0          | 2                       | 0    | 0     | 0    | 2          | 14         |
| Grand Total   | 0                            | 60   | 18    | 0    | 78         | 0                            | 83   | 0     | 0    | 83         | 0         | 0    | 0     | 0    | 0          | 22                      | 0    | 0     | 0    | 22         | 183        |
| Apprch %      | 0                            | 76.9 | 23.1  | 0    |            | 0                            | 100  | 0     | 0    |            | 0         | 0    | 0     | 0    |            | 100                     | 0    | 0     | 0    |            |            |
| Total %       | 0                            | 32.8 | 9.8   | 0    | 42.6       | 0                            | 45.4 | 0     | 0    | 45.4       | 0         | 0    | 0     | 0    | 0          | 12                      | 0    | 0     | 0    | 12         |            |

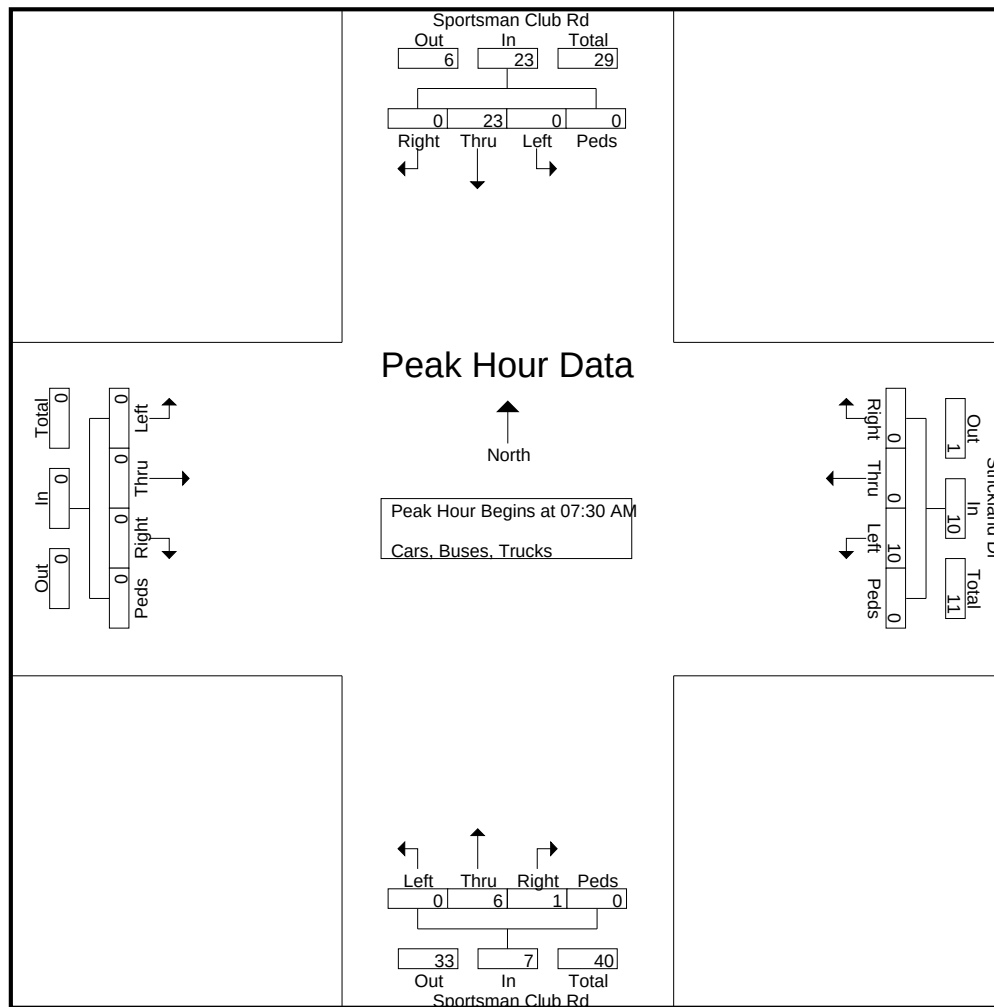
# Reliable Traffic Data Services, LLC

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info@reliabletraffic.org | www.reliabletraffic.org

TMC Data  
Sportsman Club Rd @ Strickland Dr  
Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520001  
Site Code : 39520001  
Start Date : 11/17/2016  
Page No : 2

|                                                            | Sportsman Club Rd Northbound |      |       |      |            | Sportsman Club Rd Southbound |      |       |      |            | Eastbound |      |       |      |            | Strickland Dr Westbound |      |       |      |            |            |
|------------------------------------------------------------|------------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|-----------|------|-------|------|------------|-------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                         | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Left      | Thru | Right | Peds | App. Total | Left                    | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                              |      |       |      |            |                              |      |       |      |            |           |      |       |      |            |                         |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                              |      |       |      |            |                              |      |       |      |            |           |      |       |      |            |                         |      |       |      |            |            |
| 07:30 AM                                                   | 0                            | 3    | 0     | 0    | 3          | 0                            | 6    | 0     | 0    | 6          | 0         | 0    | 0     | 0    | 0          | 2                       | 0    | 0     | 0    | 2          | 11         |
| 07:45 AM                                                   | 0                            | 2    | 0     | 0    | 2          | 0                            | 3    | 0     | 0    | 3          | 0         | 0    | 0     | 0    | 0          | 2                       | 0    | 0     | 0    | 2          | 7          |
| 08:00 AM                                                   | 0                            | 0    | 1     | 0    | 1          | 0                            | 9    | 0     | 0    | 9          | 0         | 0    | 0     | 0    | 0          | 5                       | 0    | 0     | 0    | 5          | 15         |
| 08:15 AM                                                   | 0                            | 1    | 0     | 0    | 1          | 0                            | 5    | 0     | 0    | 5          | 0         | 0    | 0     | 0    | 0          | 1                       | 0    | 0     | 0    | 1          | 7          |
| Total Volume                                               | 0                            | 6    | 1     | 0    | 7          | 0                            | 23   | 0     | 0    | 23         | 0         | 0    | 0     | 0    | 0          | 10                      | 0    | 0     | 0    | 10         | 40         |
| % App. Total                                               | 0                            | 85.7 | 14.3  | 0    |            | 0                            | 100  | 0     | 0    |            | 0         | 0    | 0     | 0    |            | 100                     | 0    | 0     | 0    |            |            |
| PHF                                                        | .000                         | .500 | .250  | .000 | .583       | .000                         | .639 | .000  | .000 | .639       | .000      | .000 | .000  | .000 | .000       | .500                    | .000 | .000  | .000 | .500       | .667       |



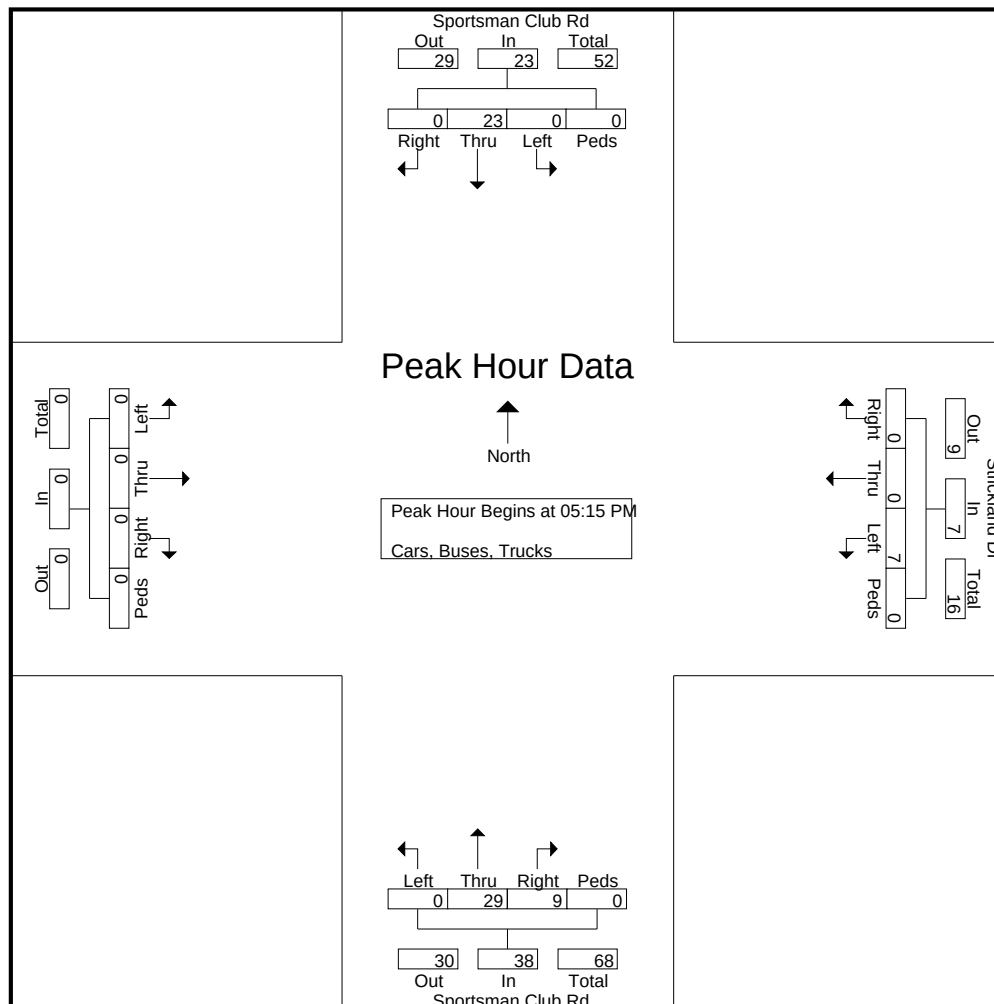
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TMC Data  
Sportsman Club Rd @ Strickland Dr  
Gainesville, GA  
7-9am I 4.30-6.30pm

File Name : 39520001  
Site Code : 39520001  
Start Date : 11/17/2016  
Page No : 3

|                                                            | Sportsman Club Rd Northbound |      |       |      |            | Sportsman Club Rd Southbound |      |       |      |            | Eastbound |      |       |      |            | Strickland Dr Westbound |      |       |      |            |            |
|------------------------------------------------------------|------------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|-----------|------|-------|------|------------|-------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                         | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Left      | Thru | Right | Peds | App. Total | Left                    | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1 |                              |      |       |      |            |                              |      |       |      |            |           |      |       |      |            |                         |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 05:15 PM       |                              |      |       |      |            |                              |      |       |      |            |           |      |       |      |            |                         |      |       |      |            |            |
| 05:15 PM                                                   | 0                            | 4    | 5     | 0    | 9          | 0                            | 7    | 0     | 0    | 7          | 0         | 0    | 0     | 0    | 0          | 4                       | 0    | 0     | 0    | 4          | 20         |
| 05:30 PM                                                   | 0                            | 10   | 1     | 0    | 11         | 0                            | 4    | 0     | 0    | 4          | 0         | 0    | 0     | 0    | 0          | 3                       | 0    | 0     | 0    | 3          | 18         |
| 05:45 PM                                                   | 0                            | 6    | 1     | 0    | 7          | 0                            | 7    | 0     | 0    | 7          | 0         | 0    | 0     | 0    | 0          | 0                       | 0    | 0     | 0    | 0          | 14         |
| 06:00 PM                                                   | 0                            | 9    | 2     | 0    | 11         | 0                            | 5    | 0     | 0    | 5          | 0         | 0    | 0     | 0    | 0          | 0                       | 0    | 0     | 0    | 0          | 16         |
| Total Volume                                               | 0                            | 29   | 9     | 0    | 38         | 0                            | 23   | 0     | 0    | 23         | 0         | 0    | 0     | 0    | 0          | 7                       | 0    | 0     | 0    | 7          | 68         |
| % App. Total                                               | 0                            | 76.3 | 23.7  | 0    |            | 0                            | 100  | 0     | 0    |            | 0         | 0    | 0     | 0    |            | 100                     | 0    | 0     | 0    |            |            |
| PHF                                                        | .000                         | .725 | .450  | .000 | .864       | .000                         | .821 | .000  | .000 | .821       | .000      | .000 | .000  | .000 | .000       | .438                    | .000 | .000  | .000 | .438       | .850       |



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TMC Data  
Dawsonville Hwy (SR53) @  
Sportsman Club Rd, Gainesville, GA  
7-9am I 4.30-6.30pm

File Name : 39520002  
Site Code : 39520002  
Start Date : 11/17/2016  
Page No : 1

## Groups Printed- Cars, Buses, Trucks

|               | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Truck Turn Around<br>Eastbound |      |       |      |            | Sportsman Club Rd<br>Westbound |      |       |      |            |            |
|---------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|--------------------------------|------|-------|------|------------|--------------------------------|------|-------|------|------------|------------|
| Start Time    | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                           | Thru | Right | Peds | App. Total | Left                           | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 0                                    | 156  | 4     | 0    | 160        | 1                                    | 326  | 0     | 0    | 327        | 0                              | 0    | 0     | 0    | 0          | 5                              | 0    | 4     | 0    | 9          | 496        |
| 07:15 AM      | 0                                    | 165  | 2     | 0    | 167        | 4                                    | 391  | 0     | 0    | 395        | 0                              | 0    | 0     | 0    | 0          | 3                              | 0    | 6     | 0    | 9          | 571        |
| 07:30 AM      | 0                                    | 168  | 2     | 0    | 170        | 4                                    | 492  | 0     | 0    | 496        | 0                              | 0    | 0     | 0    | 0          | 6                              | 0    | 2     | 0    | 8          | 674        |
| 07:45 AM      | 0                                    | 189  | 1     | 0    | 190        | 1                                    | 448  | 0     | 0    | 449        | 0                              | 0    | 0     | 0    | 0          | 4                              | 0    | 2     | 0    | 6          | 645        |
| Total         | 0                                    | 678  | 9     | 0    | 687        | 10                                   | 1657 | 0     | 0    | 1667       | 0                              | 0    | 0     | 0    | 0          | 18                             | 0    | 14    | 0    | 32         | 2386       |
| 08:00 AM      | 0                                    | 221  | 3     | 0    | 224        | 0                                    | 356  | 0     | 0    | 356        | 0                              | 0    | 0     | 0    | 0          | 12                             | 0    | 5     | 0    | 17         | 597        |
| 08:15 AM      | 0                                    | 175  | 3     | 0    | 178        | 1                                    | 364  | 0     | 0    | 365        | 0                              | 0    | 0     | 0    | 0          | 4                              | 0    | 1     | 0    | 5          | 548        |
| 08:30 AM      | 2                                    | 192  | 3     | 0    | 197        | 1                                    | 320  | 2     | 0    | 323        | 0                              | 0    | 0     | 0    | 0          | 1                              | 0    | 1     | 0    | 2          | 522        |
| 08:45 AM      | 1                                    | 164  | 4     | 0    | 169        | 3                                    | 267  | 0     | 0    | 270        | 0                              | 0    | 0     | 0    | 0          | 8                              | 0    | 0     | 0    | 8          | 447        |
| Total         | 3                                    | 752  | 13    | 0    | 768        | 5                                    | 1307 | 2     | 0    | 1314       | 0                              | 0    | 0     | 0    | 0          | 25                             | 0    | 7     | 0    | 32         | 2114       |
| *** BREAK *** |                                      |      |       |      |            |                                      |      |       |      |            |                                |      |       |      |            |                                |      |       |      |            |            |
| 04:30 PM      | 0                                    | 344  | 9     | 0    | 353        | 1                                    | 258  | 0     | 0    | 259        | 0                              | 0    | 0     | 0    | 0          | 4                              | 0    | 1     | 0    | 5          | 617        |
| 04:45 PM      | 0                                    | 411  | 3     | 0    | 414        | 1                                    | 239  | 0     | 0    | 240        | 0                              | 0    | 0     | 0    | 0          | 8                              | 0    | 2     | 0    | 10         | 664        |
| Total         | 0                                    | 755  | 12    | 0    | 767        | 2                                    | 497  | 0     | 0    | 499        | 0                              | 0    | 0     | 0    | 0          | 12                             | 0    | 3     | 0    | 15         | 1281       |
| 05:00 PM      | 2                                    | 410  | 3     | 0    | 415        | 6                                    | 271  | 0     | 0    | 277        | 0                              | 0    | 0     | 0    | 0          | 4                              | 0    | 2     | 0    | 6          | 698        |
| 05:15 PM      | 0                                    | 437  | 6     | 0    | 443        | 4                                    | 267  | 0     | 0    | 271        | 0                              | 0    | 0     | 0    | 0          | 10                             | 0    | 4     | 0    | 14         | 728        |
| 05:30 PM      | 0                                    | 413  | 7     | 0    | 420        | 4                                    | 262  | 0     | 0    | 266        | 0                              | 0    | 0     | 0    | 0          | 6                              | 0    | 1     | 0    | 7          | 693        |
| 05:45 PM      | 0                                    | 374  | 5     | 0    | 379        | 3                                    | 267  | 0     | 0    | 270        | 0                              | 0    | 0     | 0    | 0          | 6                              | 0    | 3     | 0    | 9          | 658        |
| Total         | 2                                    | 1634 | 21    | 0    | 1657       | 17                                   | 1067 | 0     | 0    | 1084       | 0                              | 0    | 0     | 0    | 0          | 26                             | 0    | 10    | 0    | 36         | 2777       |
| 06:00 PM      | 1                                    | 421  | 12    | 0    | 434        | 0                                    | 250  | 0     | 0    | 250        | 0                              | 0    | 0     | 0    | 0          | 6                              | 0    | 1     | 0    | 7          | 691        |
| 06:15 PM      | 0                                    | 318  | 7     | 0    | 325        | 3                                    | 252  | 0     | 0    | 255        | 0                              | 0    | 0     | 0    | 0          | 7                              | 0    | 3     | 0    | 10         | 590        |
| Grand Total   | 6                                    | 4558 | 74    | 0    | 4638       | 37                                   | 5030 | 2     | 0    | 5069       | 0                              | 0    | 0     | 0    | 0          | 94                             | 0    | 38    | 0    | 132        | 9839       |
| Apprch %      | 0.1                                  | 98.3 | 1.6   | 0    |            | 0.7                                  | 99.2 | 0     | 0    |            | 0                              | 0    | 0     | 0    |            | 71.2                           | 0    | 28.8  | 0    |            |            |
| Total %       | 0.1                                  | 46.3 | 0.8   | 0    | 47.1       | 0.4                                  | 51.1 | 0     | 0    | 51.5       | 0                              | 0    | 0     | 0    |            | 1                              | 0    | 0.4   | 0    | 1.3        |            |

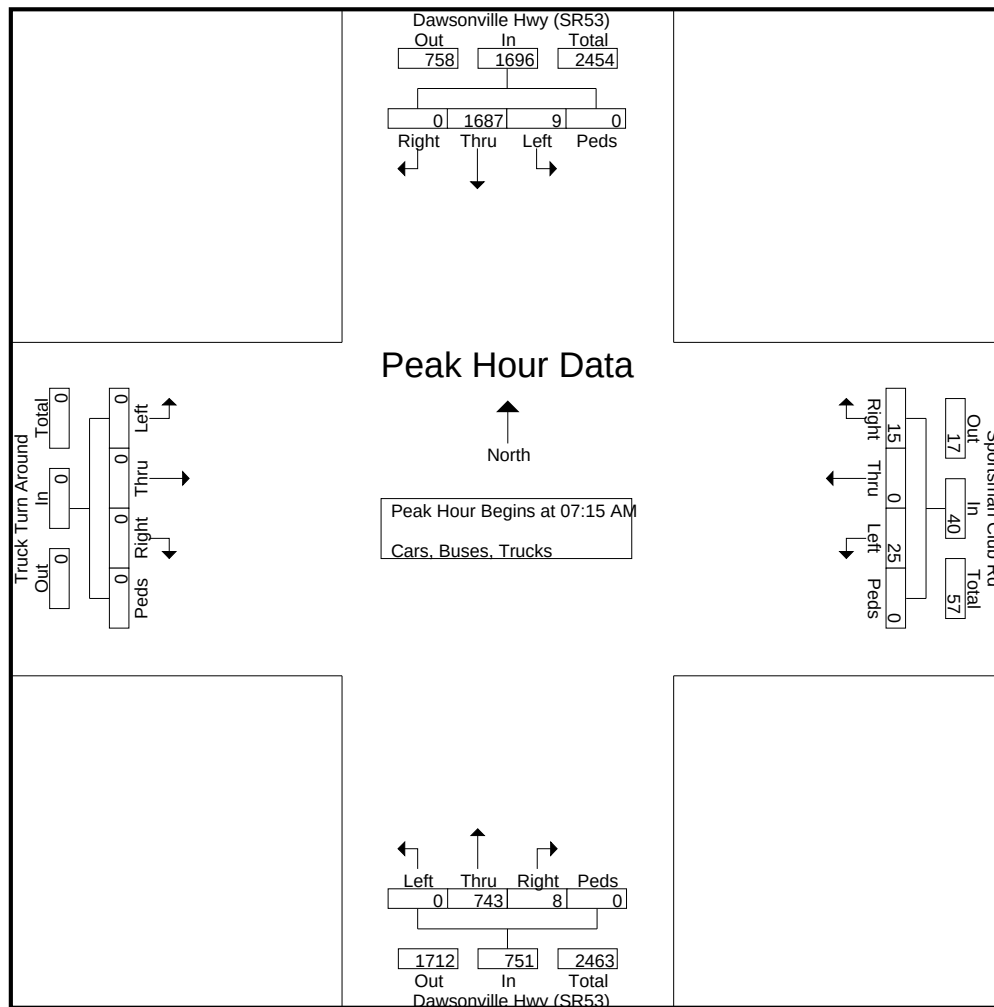
# Reliable Traffic Data Services, LLC

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TMC Data  
Dawsonville Hwy (SR53) @  
Sportsman Club Rd, Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520002  
Site Code : 39520002  
Start Date : 11/17/2016  
Page No : 2

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Truck Turn Around<br>Eastbound |      |       |      |            | Sportsman Club Rd<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|--------------------------------|------|-------|------|------------|--------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                           | Thru | Right | Peds | App. Total | Left                           | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                                |      |       |      |            |                                |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:15 AM       |                                      |      |       |      |            |                                      |      |       |      |            |                                |      |       |      |            |                                |      |       |      |            |            |
| 07:15 AM                                                   | 0                                    | 165  | 2     | 0    | 167        | 4                                    | 391  | 0     | 0    | 395        | 0                              | 0    | 0     | 0    | 0          | 3                              | 0    | 6     | 0    | 9          | 571        |
| 07:30 AM                                                   | 0                                    | 168  | 2     | 0    | 170        | 4                                    | 492  | 0     | 0    | 496        | 0                              | 0    | 0     | 0    | 0          | 6                              | 0    | 2     | 0    | 8          | 674        |
| 07:45 AM                                                   | 0                                    | 189  | 1     | 0    | 190        | 1                                    | 448  | 0     | 0    | 449        | 0                              | 0    | 0     | 0    | 0          | 4                              | 0    | 2     | 0    | 6          | 645        |
| 08:00 AM                                                   | 0                                    | 221  | 3     | 0    | 224        | 0                                    | 356  | 0     | 0    | 356        | 0                              | 0    | 0     | 0    | 0          | 12                             | 0    | 5     | 0    | 17         | 597        |
| Total Volume                                               | 0                                    | 743  | 8     | 0    | 751        | 9                                    | 1687 | 0     | 0    | 1696       | 0                              | 0    | 0     | 0    | 0          | 25                             | 0    | 15    | 0    | 40         | 2487       |
| % App. Total                                               | 0                                    | 98.9 | 1.1   | 0    |            | 0.5                                  | 99.5 | 0     | 0    |            | 0                              | 0    | 0     | 0    |            | 62.5                           | 0    | 37.5  | 0    |            |            |
| PHF                                                        | .000                                 | .840 | .667  | .000 | .838       | .563                                 | .857 | .000  | .000 | .855       | .000                           | .000 | .000  | .000 | .000       | .521                           | .000 | .625  | .000 | .588       | .922       |





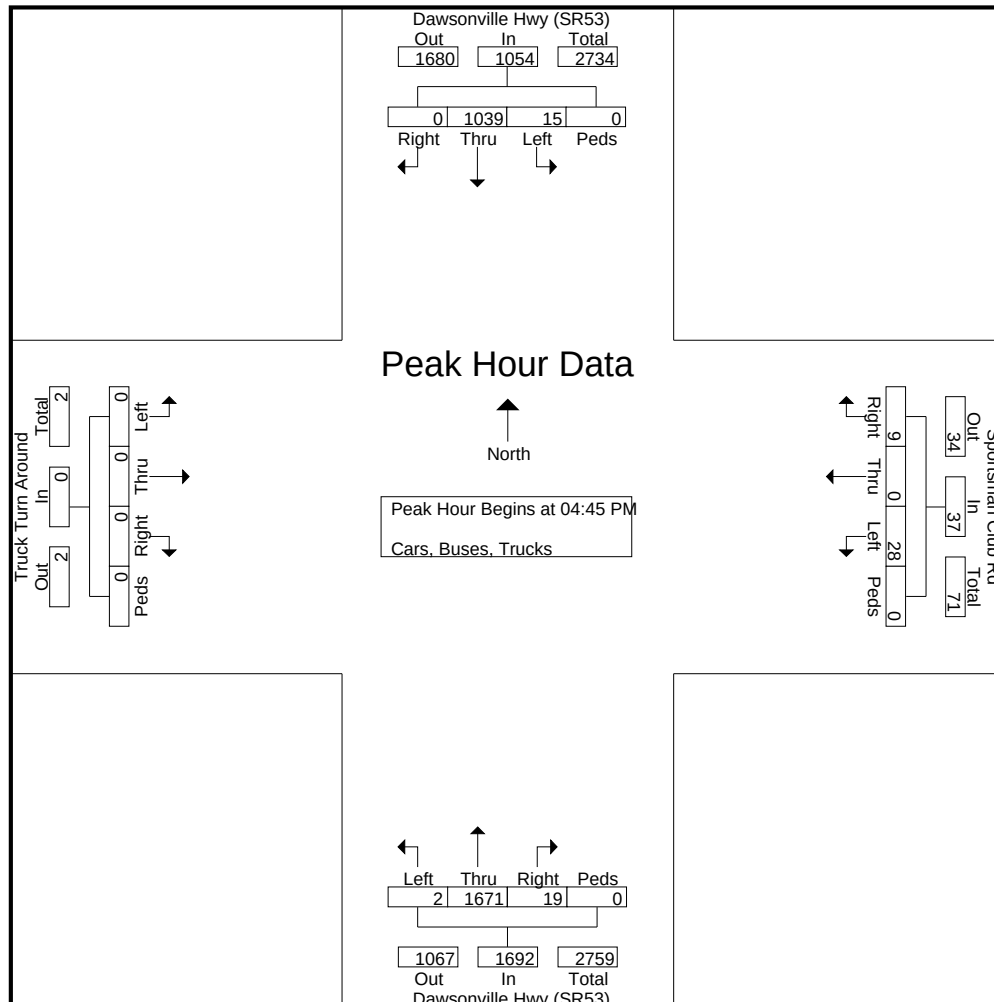
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TMC Data  
Dawsonville Hwy (SR53) @  
Sportsman Club Rd, Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520002  
Site Code : 39520002  
Start Date : 11/17/2016  
Page No : 3

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Truck Turn Around<br>Eastbound |      |       |      |            | Sportsman Club Rd<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|--------------------------------|------|-------|------|------------|--------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                           | Thru | Right | Peds | App. Total | Left                           | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                                |      |       |      |            |                                |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 04:45 PM       |                                      |      |       |      |            |                                      |      |       |      |            |                                |      |       |      |            |                                |      |       |      |            |            |
| 04:45 PM                                                   | 0                                    | 411  | 3     | 0    | 414        | 1                                    | 239  | 0     | 0    | 240        | 0                              | 0    | 0     | 0    | 0          | 8                              | 0    | 2     | 0    | 10         | 664        |
| 05:00 PM                                                   | 2                                    | 410  | 3     | 0    | 415        | 6                                    | 271  | 0     | 0    | 277        | 0                              | 0    | 0     | 0    | 0          | 4                              | 0    | 2     | 0    | 6          | 698        |
| 05:15 PM                                                   | 0                                    | 437  | 6     | 0    | 443        | 4                                    | 267  | 0     | 0    | 271        | 0                              | 0    | 0     | 0    | 0          | 10                             | 0    | 4     | 0    | 14         | 728        |
| 05:30 PM                                                   | 0                                    | 413  | 7     | 0    | 420        | 4                                    | 262  | 0     | 0    | 266        | 0                              | 0    | 0     | 0    | 0          | 6                              | 0    | 1     | 0    | 7          | 693        |
| Total Volume                                               | 2                                    | 1671 | 19    | 0    | 1692       | 15                                   | 1039 | 0     | 0    | 1054       | 0                              | 0    | 0     | 0    | 0          | 28                             | 0    | 9     | 0    | 37         | 2783       |
| % App. Total                                               | 0.1                                  | 98.8 | 1.1   | 0    |            | 1.4                                  | 98.6 | 0     | 0    |            | 0                              | 0    | 0     | 0    |            | 75.7                           | 0    | 24.3  | 0    |            |            |
| PHF                                                        | .250                                 | .956 | .679  | .000 | .955       | .625                                 | .958 | .000  | .000 | .951       | .000                           | .000 | .000  | .000 | .000       | .700                           | .000 | .563  | .000 | .661       | .956       |



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TMC Data  
Dawsonville Hwy (SR53) @ Avonlea Way  
Gainesville, GA  
7-9am I 4.30-6.30pm

File Name : 39520003  
Site Code : 39520003  
Start Date : 11/17/2016  
Page No : 1

## Groups Printed- Cars, Buses, Trucks

|               | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Avonlea Way<br>Eastbound |      |       |      |            | Residential Drwy<br>Westbound |      |       |      |            |            |
|---------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|--------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|------------|
| Start Time    | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                     | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 3                                    | 160  | 0     | 0    | 163        | 0                                    | 324  | 0     | 0    | 324        | 6                        | 0    | 18    | 0    | 24         | 0                             | 0    | 0     | 0    | 0          | 511        |
| 07:15 AM      | 2                                    | 162  | 1     | 0    | 165        | 0                                    | 381  | 0     | 0    | 381        | 6                        | 0    | 25    | 0    | 31         | 1                             | 0    | 0     | 0    | 1          | 578        |
| 07:30 AM      | 6                                    | 164  | 1     | 0    | 171        | 0                                    | 485  | 2     | 0    | 487        | 2                        | 0    | 22    | 0    | 24         | 0                             | 0    | 0     | 0    | 0          | 682        |
| 07:45 AM      | 2                                    | 193  | 0     | 0    | 195        | 0                                    | 442  | 1     | 0    | 443        | 7                        | 0    | 19    | 0    | 26         | 0                             | 0    | 0     | 0    | 0          | 664        |
| Total         | 13                                   | 679  | 2     | 0    | 694        | 0                                    | 1632 | 3     | 0    | 1635       | 21                       | 0    | 84    | 0    | 105        | 1                             | 0    | 0     | 0    | 1          | 2435       |
| 08:00 AM      | 2                                    | 216  | 0     | 0    | 218        | 0                                    | 367  | 1     | 0    | 368        | 4                        | 0    | 15    | 0    | 19         | 0                             | 0    | 0     | 0    | 0          | 605        |
| 08:15 AM      | 2                                    | 184  | 0     | 0    | 186        | 0                                    | 374  | 2     | 0    | 376        | 2                        | 0    | 16    | 0    | 18         | 0                             | 0    | 0     | 0    | 0          | 580        |
| 08:30 AM      | 4                                    | 198  | 0     | 0    | 202        | 0                                    | 326  | 3     | 0    | 329        | 3                        | 0    | 21    | 0    | 24         | 0                             | 0    | 0     | 0    | 0          | 555        |
| 08:45 AM      | 3                                    | 167  | 0     | 0    | 170        | 0                                    | 278  | 2     | 0    | 280        | 2                        | 0    | 14    | 0    | 16         | 0                             | 0    | 0     | 0    | 0          | 466        |
| Total         | 11                                   | 765  | 0     | 0    | 776        | 0                                    | 1345 | 8     | 0    | 1353       | 11                       | 0    | 66    | 0    | 77         | 0                             | 0    | 0     | 0    | 0          | 2206       |
| *** BREAK *** |                                      |      |       |      |            |                                      |      |       |      |            |                          |      |       |      |            |                               |      |       |      |            |            |
| 04:30 PM      | 14                                   | 351  | 0     | 0    | 365        | 0                                    | 267  | 3     | 0    | 270        | 0                        | 0    | 9     | 0    | 9          | 0                             | 0    | 0     | 0    | 0          | 644        |
| 04:45 PM      | 10                                   | 412  | 0     | 0    | 422        | 0                                    | 248  | 6     | 0    | 254        | 1                        | 0    | 6     | 0    | 7          | 0                             | 0    | 0     | 0    | 0          | 683        |
| Total         | 24                                   | 763  | 0     | 0    | 787        | 0                                    | 515  | 9     | 0    | 524        | 1                        | 0    | 15    | 0    | 16         | 0                             | 0    | 0     | 0    | 0          | 1327       |
| 05:00 PM      | 21                                   | 416  | 0     | 0    | 437        | 0                                    | 273  | 4     | 0    | 277        | 7                        | 0    | 9     | 0    | 16         | 0                             | 0    | 0     | 0    | 0          | 730        |
| 05:15 PM      | 10                                   | 442  | 0     | 0    | 452        | 0                                    | 279  | 2     | 0    | 281        | 1                        | 0    | 18    | 0    | 19         | 0                             | 0    | 0     | 0    | 0          | 752        |
| 05:30 PM      | 13                                   | 418  | 0     | 0    | 431        | 1                                    | 272  | 6     | 0    | 279        | 0                        | 0    | 9     | 0    | 9          | 0                             | 0    | 0     | 0    | 0          | 719        |
| 05:45 PM      | 18                                   | 374  | 0     | 0    | 392        | 1                                    | 278  | 2     | 0    | 281        | 3                        | 0    | 11    | 0    | 14         | 0                             | 0    | 0     | 0    | 0          | 687        |
| Total         | 62                                   | 1650 | 0     | 0    | 1712       | 2                                    | 1102 | 14    | 0    | 1118       | 11                       | 0    | 47    | 0    | 58         | 0                             | 0    | 0     | 0    | 0          | 2888       |
| 06:00 PM      | 21                                   | 420  | 0     | 0    | 441        | 1                                    | 256  | 4     | 0    | 261        | 3                        | 0    | 12    | 0    | 15         | 0                             | 0    | 0     | 0    | 0          | 717        |
| 06:15 PM      | 13                                   | 328  | 0     | 0    | 341        | 0                                    | 247  | 3     | 0    | 250        | 1                        | 0    | 10    | 0    | 11         | 0                             | 0    | 0     | 0    | 0          | 602        |
| Grand Total   | 144                                  | 4605 | 2     | 0    | 4751       | 3                                    | 5097 | 41    | 0    | 5141       | 48                       | 0    | 234   | 0    | 282        | 1                             | 0    | 0     | 0    | 1          | 10175      |
| Apprch %      | 3                                    | 96.9 | 0     | 0    |            | 0.1                                  | 99.1 | 0.8   | 0    |            | 17                       | 0    | 83    | 0    |            | 100                           | 0    | 0     | 0    |            |            |
| Total %       | 1.4                                  | 45.3 | 0     | 0    | 46.7       | 0                                    | 50.1 | 0.4   | 0    | 50.5       | 0.5                      | 0    | 2.3   | 0    | 2.8        | 0                             | 0    | 0     | 0    | 0          |            |

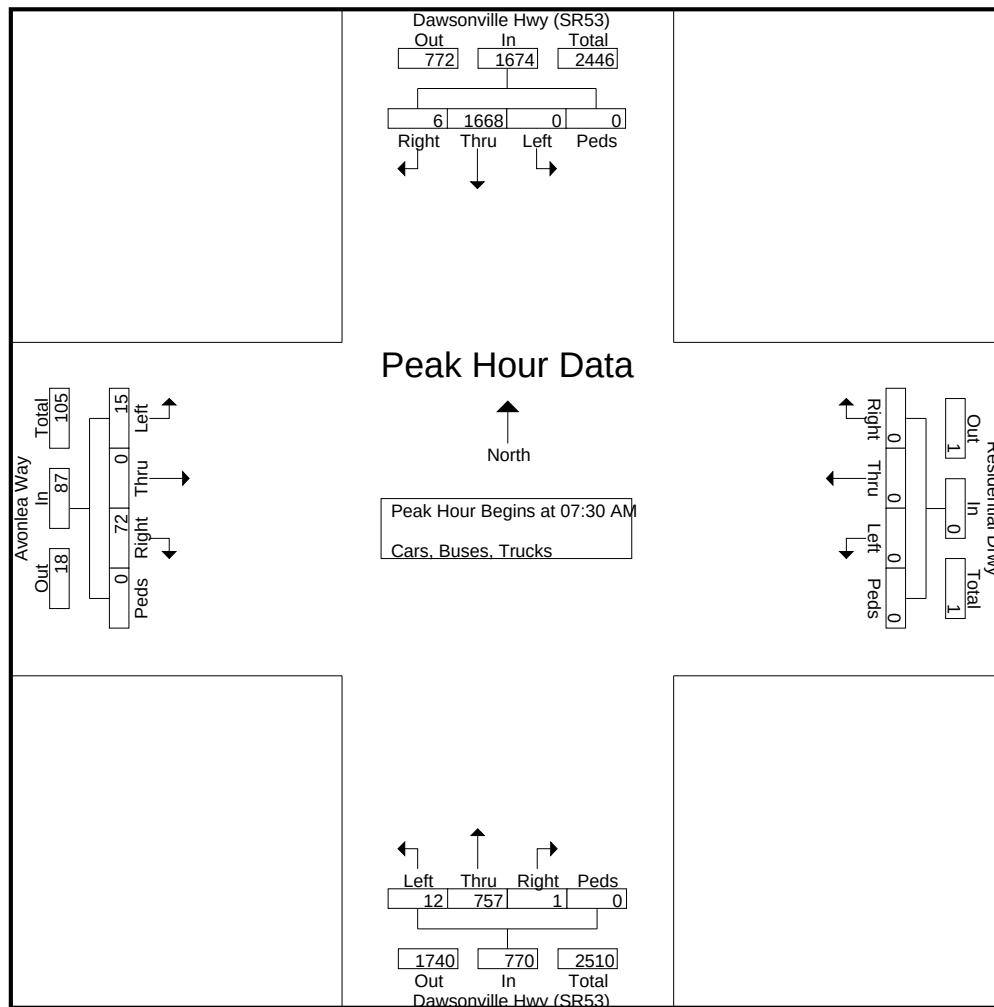
# Reliable Traffic Data Services, LLC

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TMC Data  
Dawsonville Hwy (SR53) @ Avonlea Way  
Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520003  
Site Code : 39520003  
Start Date : 11/17/2016  
Page No : 2

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Avonlea Way<br>Eastbound |      |       |      |            | Residential Drwy<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|--------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                     | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                          |      |       |      |            |                               |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                                      |      |       |      |            |                                      |      |       |      |            |                          |      |       |      |            |                               |      |       |      |            |            |
| 07:30 AM                                                   | 6                                    | 164  | 1     | 0    | 171        | 0                                    | 485  | 2     | 0    | 487        | 2                        | 0    | 22    | 0    | 24         | 0                             | 0    | 0     | 0    | 0          | 682        |
| 07:45 AM                                                   | 2                                    | 193  | 0     | 0    | 195        | 0                                    | 442  | 1     | 0    | 443        | 7                        | 0    | 19    | 0    | 26         | 0                             | 0    | 0     | 0    | 0          | 664        |
| 08:00 AM                                                   | 2                                    | 216  | 0     | 0    | 218        | 0                                    | 367  | 1     | 0    | 368        | 4                        | 0    | 15    | 0    | 19         | 0                             | 0    | 0     | 0    | 0          | 605        |
| 08:15 AM                                                   | 2                                    | 184  | 0     | 0    | 186        | 0                                    | 374  | 2     | 0    | 376        | 2                        | 0    | 16    | 0    | 18         | 0                             | 0    | 0     | 0    | 0          | 580        |
| Total Volume                                               | 12                                   | 757  | 1     | 0    | 770        | 0                                    | 1668 | 6     | 0    | 1674       | 15                       | 0    | 72    | 0    | 87         | 0                             | 0    | 0     | 0    | 0          | 2531       |
| % App. Total                                               | 1.6                                  | 98.3 | 0.1   | 0    |            | 0                                    | 99.6 | 0.4   | 0    |            | 17.2                     | 0    | 82.8  | 0    |            | 0                             | 0    | 0     | 0    |            |            |
| PHF                                                        | .500                                 | .876 | .250  | .000 | .883       | .000                                 | .860 | .750  | .000 | .859       | .536                     | .000 | .818  | .000 | .837       | .000                          | .000 | .000  | .000 | .000       | .928       |



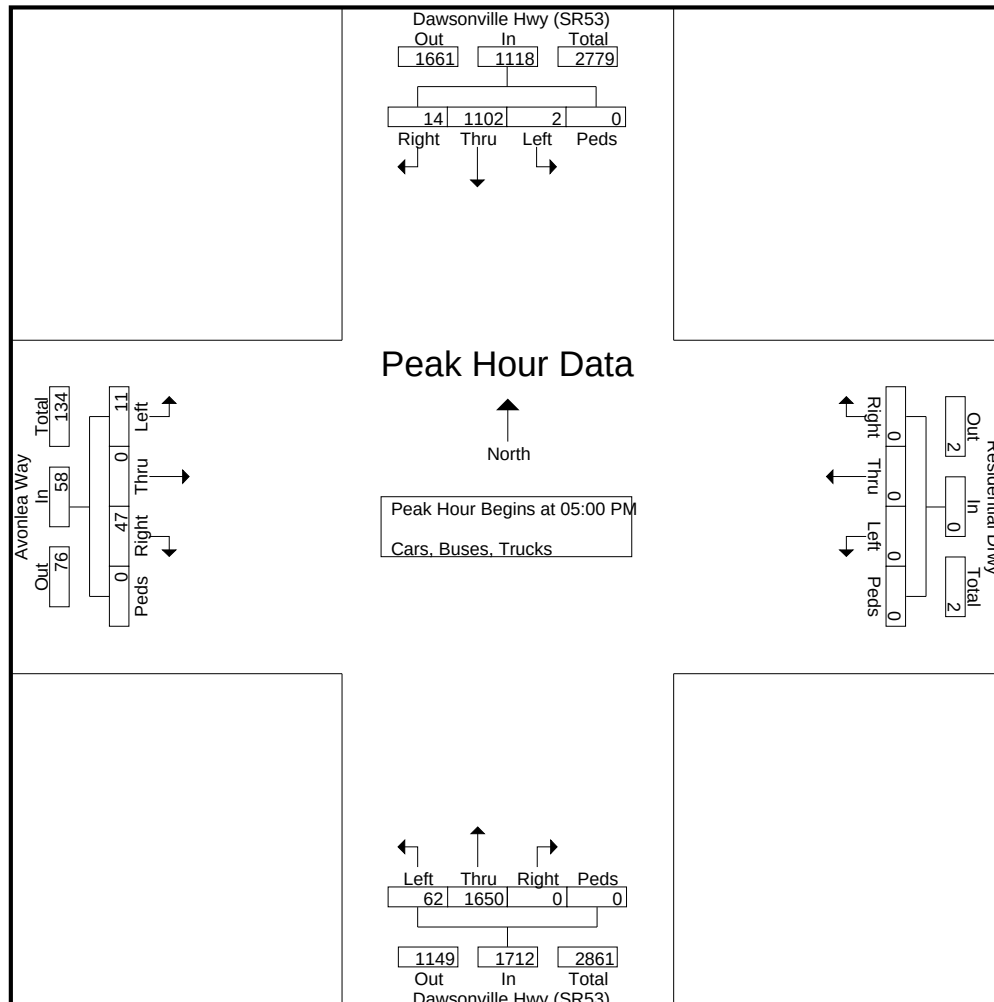
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TMC Data  
Dawsonville Hwy (SR53) @ Avonlea Way  
Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520003  
Site Code : 39520003  
Start Date : 11/17/2016  
Page No : 3

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Avonlea Way<br>Eastbound |      |       |      |            | Residential Drwy<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|--------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                     | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                          |      |       |      |            |                               |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                                      |      |       |      |            |                                      |      |       |      |            |                          |      |       |      |            |                               |      |       |      |            |            |
| 05:00 PM                                                   | 21                                   | 416  | 0     | 0    | 437        | 0                                    | 273  | 4     | 0    | 277        | 7                        | 0    | 9     | 0    | 16         | 0                             | 0    | 0     | 0    | 0          | 730        |
| 05:15 PM                                                   | 10                                   | 442  | 0     | 0    | 452        | 0                                    | 279  | 2     | 0    | 281        | 1                        | 0    | 18    | 0    | 19         | 0                             | 0    | 0     | 0    | 0          | 752        |
| 05:30 PM                                                   | 13                                   | 418  | 0     | 0    | 431        | 1                                    | 272  | 6     | 0    | 279        | 0                        | 0    | 9     | 0    | 9          | 0                             | 0    | 0     | 0    | 0          | 719        |
| 05:45 PM                                                   | 18                                   | 374  | 0     | 0    | 392        | 1                                    | 278  | 2     | 0    | 281        | 3                        | 0    | 11    | 0    | 14         | 0                             | 0    | 0     | 0    | 0          | 687        |
| Total Volume                                               | 62                                   | 1650 | 0     | 0    | 1712       | 2                                    | 1102 | 14    | 0    | 1118       | 11                       | 0    | 47    | 0    | 58         | 0                             | 0    | 0     | 0    | 0          | 2888       |
| % App. Total                                               | 3.6                                  | 96.4 | 0     | 0    |            | 0.2                                  | 98.6 | 1.3   | 0    |            | 19                       | 0    | 81    | 0    |            | 0                             | 0    | 0     | 0    |            |            |
| PHF                                                        | .738                                 | .933 | .000  | .000 | .947       | .500                                 | .987 | .583  | .000 | .995       | .393                     | .000 | .653  | .000 | .763       | .000                          | .000 | .000  | .000 | .000       | .960       |



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TMC Data  
Dawsonville Hwy (SR53) @ Canterbury Rd  
Gainesville, GA  
7-9am I 4.30-6.30pm

File Name : 39520004  
Site Code : 39520004  
Start Date : 11/17/2016  
Page No : 1

## Groups Printed- Cars, Buses, Trucks

|               | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |         |            | Canterbury Rd<br>Eastbound |      |       |      |            | Westbound |      |       |      |            |            |
|---------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|---------|------------|----------------------------|------|-------|------|------------|-----------|------|-------|------|------------|------------|
| Start Time    | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | U-Turns | App. Total | Left                       | Thru | Right | Peds | App. Total | Left      | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 4                                    | 151  | 0     | 0    | 155        | 0                                    | 342  | 2     | 0       | 344        | 5                          | 0    | 22    | 0    | 27         | 0         | 0    | 0     | 0    | 0          | 526        |
| 07:15 AM      | 7                                    | 160  | 0     | 0    | 167        | 0                                    | 456  | 1     | 0       | 457        | 3                          | 0    | 29    | 0    | 32         | 0         | 0    | 0     | 0    | 0          | 656        |
| 07:30 AM      | 6                                    | 168  | 0     | 0    | 174        | 0                                    | 487  | 4     | 0       | 491        | 5                          | 0    | 23    | 0    | 28         | 0         | 0    | 0     | 0    | 0          | 693        |
| 07:45 AM      | 7                                    | 180  | 0     | 0    | 187        | 0                                    | 436  | 1     | 1       | 438        | 4                          | 0    | 27    | 0    | 31         | 0         | 0    | 0     | 0    | 0          | 656        |
| Total         | 24                                   | 659  | 0     | 0    | 683        | 0                                    | 1721 | 8     | 1       | 1730       | 17                         | 0    | 101   | 0    | 118        | 0         | 0    | 0     | 0    | 0          | 2531       |
| 08:00 AM      | 3                                    | 214  | 0     | 0    | 217        | 0                                    | 403  | 1     | 0       | 404        | 6                          | 0    | 16    | 0    | 22         | 0         | 0    | 0     | 0    | 0          | 643        |
| 08:15 AM      | 8                                    | 178  | 0     | 0    | 186        | 0                                    | 392  | 3     | 0       | 395        | 3                          | 0    | 18    | 0    | 21         | 0         | 0    | 0     | 0    | 0          | 602        |
| 08:30 AM      | 3                                    | 180  | 0     | 0    | 183        | 0                                    | 326  | 2     | 2       | 330        | 3                          | 0    | 11    | 0    | 14         | 0         | 0    | 0     | 0    | 0          | 527        |
| 08:45 AM      | 7                                    | 164  | 0     | 0    | 171        | 0                                    | 297  | 0     | 0       | 297        | 2                          | 0    | 8     | 0    | 10         | 0         | 0    | 0     | 0    | 0          | 478        |
| Total         | 21                                   | 736  | 0     | 0    | 757        | 0                                    | 1418 | 6     | 2       | 1426       | 14                         | 0    | 53    | 0    | 67         | 0         | 0    | 0     | 0    | 0          | 2250       |
| *** BREAK *** |                                      |      |       |      |            |                                      |      |       |         |            |                            |      |       |      |            |           |      |       |      |            |            |
| 04:30 PM      | 22                                   | 367  | 0     | 0    | 389        | 0                                    | 263  | 4     | 1       | 268        | 2                          | 0    | 13    | 0    | 15         | 0         | 0    | 0     | 0    | 0          | 672        |
| 04:45 PM      | 25                                   | 398  | 0     | 0    | 423        | 0                                    | 267  | 1     | 1       | 269        | 1                          | 0    | 16    | 0    | 17         | 0         | 0    | 0     | 0    | 0          | 709        |
| Total         | 47                                   | 765  | 0     | 0    | 812        | 0                                    | 530  | 5     | 2       | 537        | 3                          | 0    | 29    | 0    | 32         | 0         | 0    | 0     | 0    | 0          | 1381       |
| 05:00 PM      | 21                                   | 426  | 0     | 0    | 447        | 0                                    | 271  | 1     | 1       | 273        | 3                          | 0    | 8     | 0    | 11         | 0         | 0    | 0     | 0    | 0          | 731        |
| 05:15 PM      | 33                                   | 432  | 0     | 0    | 465        | 0                                    | 278  | 3     | 0       | 281        | 2                          | 0    | 4     | 0    | 6          | 0         | 0    | 0     | 0    | 0          | 752        |
| 05:30 PM      | 26                                   | 418  | 0     | 0    | 444        | 0                                    | 272  | 5     | 0       | 277        | 1                          | 0    | 7     | 0    | 8          | 0         | 0    | 0     | 0    | 0          | 729        |
| 05:45 PM      | 31                                   | 406  | 0     | 0    | 437        | 0                                    | 284  | 5     | 2       | 291        | 1                          | 0    | 9     | 0    | 10         | 0         | 0    | 0     | 0    | 0          | 738        |
| Total         | 111                                  | 1682 | 0     | 0    | 1793       | 0                                    | 1105 | 14    | 3       | 1122       | 7                          | 0    | 28    | 0    | 35         | 0         | 0    | 0     | 0    | 0          | 2950       |
| 06:00 PM      | 26                                   | 387  | 0     | 0    | 413        | 0                                    | 278  | 7     | 0       | 285        | 1                          | 0    | 16    | 0    | 17         | 0         | 0    | 0     | 0    | 0          | 715        |
| 06:15 PM      | 23                                   | 364  | 0     | 0    | 387        | 0                                    | 267  | 5     | 0       | 272        | 2                          | 0    | 11    | 0    | 13         | 0         | 0    | 0     | 0    | 0          | 672        |
| Grand Total   | 252                                  | 4593 | 0     | 0    | 4845       | 0                                    | 5319 | 45    | 8       | 5372       | 44                         | 0    | 238   | 0    | 282        | 0         | 0    | 0     | 0    | 0          | 10499      |
| Apprch %      | 5.2                                  | 94.8 | 0     | 0    |            | 0                                    | 99   | 0.8   | 0.1     |            | 15.6                       | 0    | 84.4  | 0    |            | 0         | 0    | 0     | 0    |            |            |
| Total %       | 2.4                                  | 43.7 | 0     | 0    | 46.1       | 0                                    | 50.7 | 0.4   | 0.1     | 51.2       | 0.4                        | 0    | 2.3   | 0    | 2.7        | 0         | 0    | 0     | 0    | 0          |            |

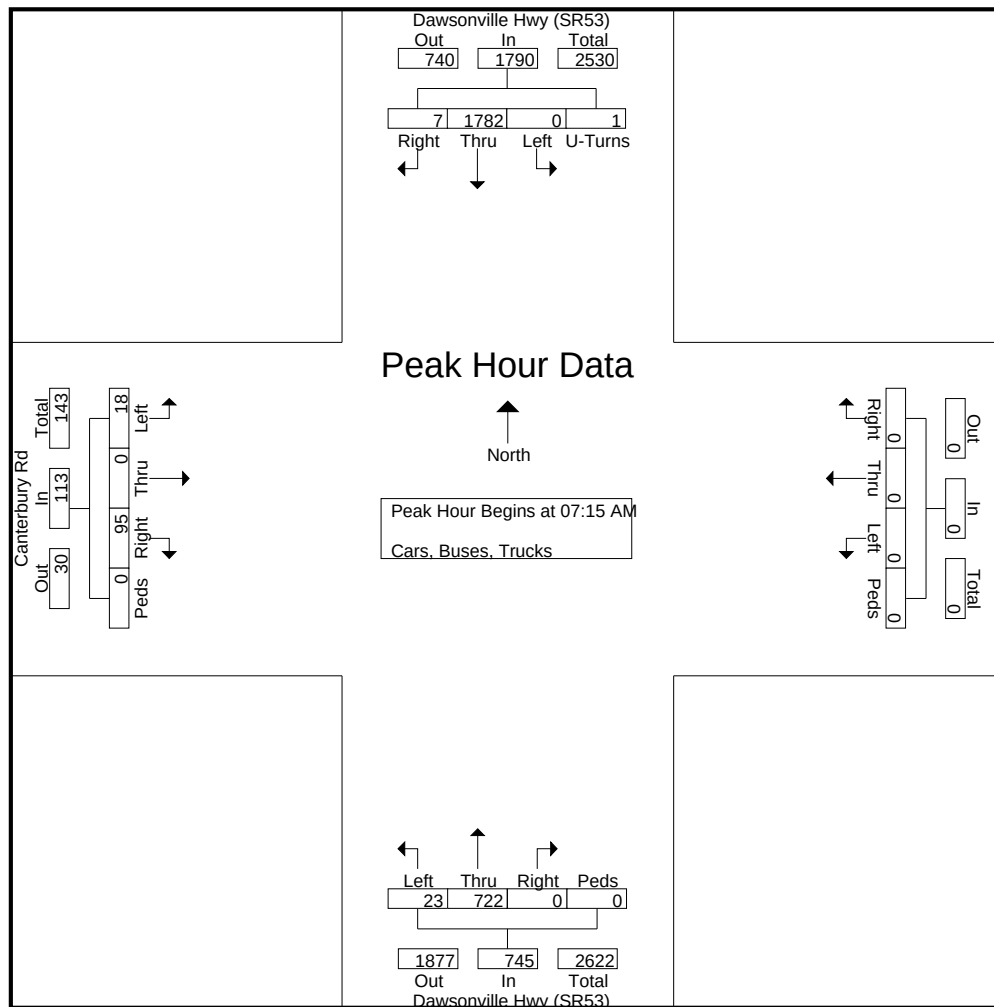
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TMC Data  
Dawsonville Hwy (SR53) @ Canterbury Rd  
Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520004  
Site Code : 39520004  
Start Date : 11/17/2016  
Page No : 2

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |         |            | Canterbury Rd<br>Eastbound |      |       |      |            | Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|---------|------------|----------------------------|------|-------|------|------------|-----------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | U-Turns | App. Total | Left                       | Thru | Right | Peds | App. Total | Left      | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |         |            |                            |      |       |      |            |           |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:15 AM       |                                      |      |       |      |            |                                      |      |       |         |            |                            |      |       |      |            |           |      |       |      |            |            |
| 07:15 AM                                                   | 7                                    | 160  | 0     | 0    | 167        | 0                                    | 456  | 1     | 0       | 457        | 3                          | 0    | 29    | 0    | 32         | 0         | 0    | 0     | 0    | 0          | 656        |
| 07:30 AM                                                   | 6                                    | 168  | 0     | 0    | 174        | 0                                    | 487  | 4     | 0       | 491        | 5                          | 0    | 23    | 0    | 28         | 0         | 0    | 0     | 0    | 0          | 693        |
| 07:45 AM                                                   | 7                                    | 180  | 0     | 0    | 187        | 0                                    | 436  | 1     | 1       | 438        | 4                          | 0    | 27    | 0    | 31         | 0         | 0    | 0     | 0    | 0          | 656        |
| 08:00 AM                                                   | 3                                    | 214  | 0     | 0    | 217        | 0                                    | 403  | 1     | 0       | 404        | 6                          | 0    | 16    | 0    | 22         | 0         | 0    | 0     | 0    | 0          | 643        |
| Total Volume                                               | 23                                   | 722  | 0     | 0    | 745        | 0                                    | 1782 | 7     | 1       | 1790       | 18                         | 0    | 95    | 0    | 113        | 0         | 0    | 0     | 0    | 0          | 2648       |
| % App. Total                                               | 3.1                                  | 96.9 | 0     | 0    |            | 0                                    | 99.6 | 0.4   | 0.1     |            | 15.9                       | 0    | 84.1  | 0    |            | 0         | 0    | 0     | 0    |            |            |
| PHF                                                        | .821                                 | .843 | .000  | .000 | .858       | .000                                 | .915 | .438  | .250    | .911       | .750                       | .000 | .819  | .000 | .883       | .000      | .000 | .000  | .000 | .000       | .955       |





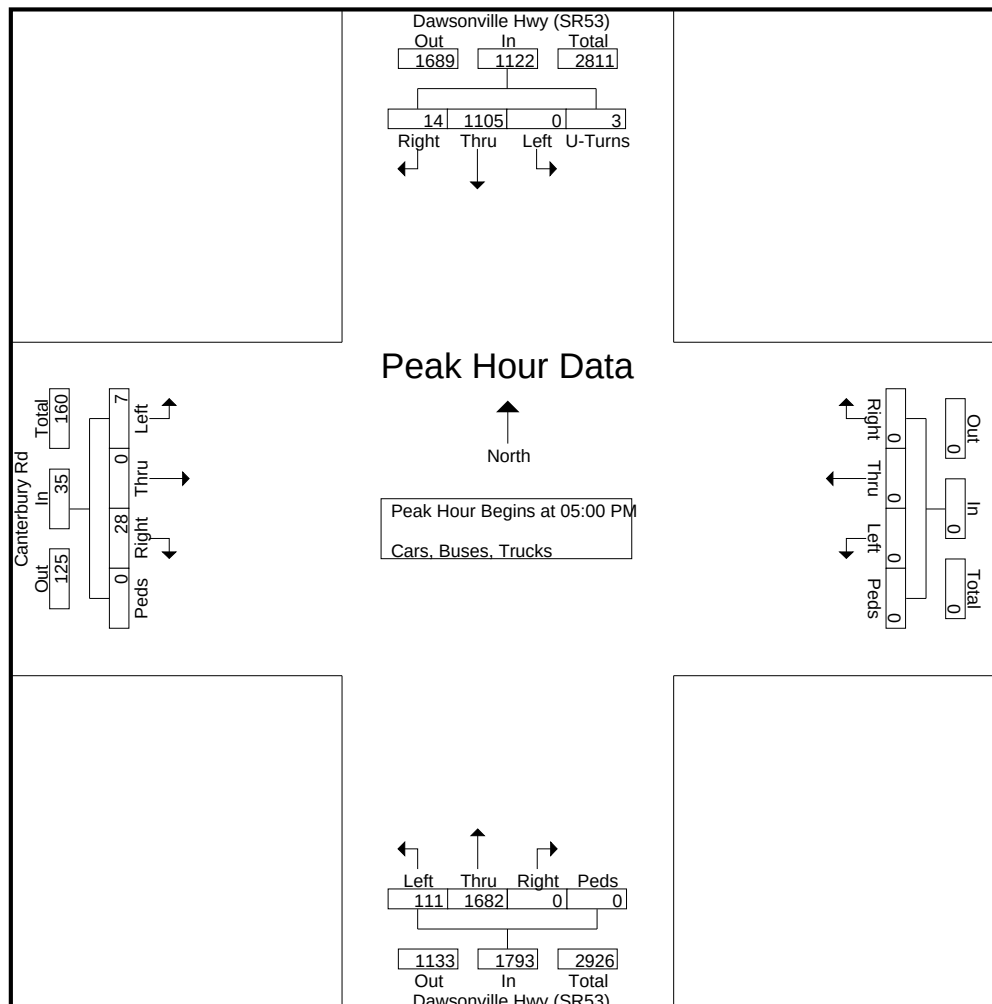
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TMC Data  
Dawsonville Hwy (SR53) @ Canterbury Rd  
Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520004  
Site Code : 39520004  
Start Date : 11/17/2016  
Page No : 3

|                                                            | Dawsonville Hwy (SR53) Northbound |      |       |      |            | Dawsonville Hwy (SR53) Southbound |      |       |         |            | Canterbury Rd Eastbound |      |       |      |            | Westbound |      |       |      |            |            |
|------------------------------------------------------------|-----------------------------------|------|-------|------|------------|-----------------------------------|------|-------|---------|------------|-------------------------|------|-------|------|------------|-----------|------|-------|------|------------|------------|
| Start Time                                                 | Left                              | Thru | Right | Peds | App. Total | Left                              | Thru | Right | U-Turns | App. Total | Left                    | Thru | Right | Peds | App. Total | Left      | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1 |                                   |      |       |      |            |                                   |      |       |         |            |                         |      |       |      |            |           |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                                   |      |       |      |            |                                   |      |       |         |            |                         |      |       |      |            |           |      |       |      |            |            |
| 05:00 PM                                                   | 21                                | 426  | 0     | 0    | 447        | 0                                 | 271  | 1     | 1       | 273        | 3                       | 0    | 8     | 0    | 11         | 0         | 0    | 0     | 0    | 0          | 731        |
| 05:15 PM                                                   | 33                                | 432  | 0     | 0    | 465        | 0                                 | 278  | 3     | 0       | 281        | 2                       | 0    | 4     | 0    | 6          | 0         | 0    | 0     | 0    | 0          | 752        |
| 05:30 PM                                                   | 26                                | 418  | 0     | 0    | 444        | 0                                 | 272  | 5     | 0       | 277        | 1                       | 0    | 7     | 0    | 8          | 0         | 0    | 0     | 0    | 0          | 729        |
| 05:45 PM                                                   | 31                                | 406  | 0     | 0    | 437        | 0                                 | 284  | 5     | 2       | 291        | 1                       | 0    | 9     | 0    | 10         | 0         | 0    | 0     | 0    | 0          | 738        |
| Total Volume                                               | 111                               | 1682 | 0     | 0    | 1793       | 0                                 | 1105 | 14    | 3       | 1122       | 7                       | 0    | 28    | 0    | 35         | 0         | 0    | 0     | 0    | 0          | 2950       |
| % App. Total                                               | 6.2                               | 93.8 | 0     | 0    |            | 0                                 | 98.5 | 1.2   | 0.3     |            | 20                      | 0    | 80    | 0    |            | 0         | 0    | 0     | 0    |            |            |
| PHF                                                        | .841                              | .973 | .000  | .000 | .964       | .000                              | .973 | .700  | .375    | .964       | .583                    | .000 | .778  | .000 | .795       | .000      | .000 | .000  | .000 | .000       | .981       |



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TMC Data  
Dawsonville Hwy (SR53) @ Ahaluna Dr/  
Lanier Valley Dr, Gainesville, GA  
7-9am I 4.30-6.30pm

File Name : 39520005  
Site Code : 39520005  
Start Date : 11/17/2016  
Page No : 1

## Groups Printed- Cars, Buses, Trucks

|               | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Lanier Valley Dr<br>Eastbound |      |       |      |            | Ahaluna Dr<br>Westbound |      |       |      |            |            |
|---------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|-------------------------|------|-------|------|------------|------------|
| Start Time    | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Left                    | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 8                                    | 146  | 2     | 0    | 156        | 4                                    | 335  | 0     | 0    | 339        | 2                             | 0    | 18    | 0    | 20         | 10                      | 2    | 4     | 0    | 16         | 531        |
| 07:15 AM      | 8                                    | 158  | 3     | 0    | 169        | 4                                    | 461  | 0     | 0    | 465        | 4                             | 0    | 31    | 0    | 35         | 10                      | 1    | 6     | 0    | 17         | 686        |
| 07:30 AM      | 16                                   | 159  | 5     | 0    | 180        | 7                                    | 542  | 0     | 0    | 549        | 5                             | 1    | 32    | 0    | 38         | 13                      | 0    | 5     | 0    | 18         | 785        |
| 07:45 AM      | 17                                   | 173  | 2     | 0    | 192        | 1                                    | 506  | 0     | 0    | 507        | 5                             | 2    | 29    | 0    | 36         | 5                       | 2    | 4     | 0    | 11         | 746        |
| Total         | 49                                   | 636  | 12    | 0    | 697        | 16                                   | 1844 | 0     | 0    | 1860       | 16                            | 3    | 110   | 0    | 129        | 38                      | 5    | 19    | 0    | 62         | 2748       |
| 08:00 AM      | 14                                   | 211  | 1     | 0    | 226        | 2                                    | 392  | 0     | 0    | 394        | 5                             | 2    | 23    | 0    | 30         | 9                       | 0    | 5     | 0    | 14         | 664        |
| 08:15 AM      | 13                                   | 161  | 4     | 0    | 178        | 5                                    | 424  | 0     | 0    | 429        | 3                             | 0    | 17    | 0    | 20         | 5                       | 4    | 3     | 0    | 12         | 639        |
| 08:30 AM      | 13                                   | 176  | 2     | 0    | 191        | 3                                    | 348  | 1     | 0    | 352        | 6                             | 0    | 17    | 0    | 23         | 3                       | 1    | 8     | 0    | 12         | 578        |
| 08:45 AM      | 7                                    | 175  | 1     | 0    | 183        | 3                                    | 312  | 1     | 0    | 316        | 5                             | 1    | 29    | 0    | 35         | 4                       | 1    | 5     | 0    | 10         | 544        |
| Total         | 47                                   | 723  | 8     | 0    | 778        | 13                                   | 1476 | 2     | 0    | 1491       | 19                            | 3    | 86    | 0    | 108        | 21                      | 6    | 21    | 0    | 48         | 2425       |
| *** BREAK *** |                                      |      |       |      |            |                                      |      |       |      |            |                               |      |       |      |            |                         |      |       |      |            |            |
| 04:30 PM      | 23                                   | 377  | 7     | 0    | 407        | 9                                    | 270  | 1     | 0    | 280        | 9                             | 2    | 22    | 0    | 33         | 10                      | 3    | 12    | 0    | 25         | 745        |
| 04:45 PM      | 27                                   | 435  | 6     | 0    | 468        | 4                                    | 293  | 0     | 0    | 297        | 5                             | 0    | 24    | 0    | 29         | 8                       | 1    | 16    | 0    | 25         | 819        |
| Total         | 50                                   | 812  | 13    | 0    | 875        | 13                                   | 563  | 1     | 0    | 577        | 14                            | 2    | 46    | 0    | 62         | 18                      | 4    | 28    | 0    | 50         | 1564       |
| 05:00 PM      | 40                                   | 423  | 7     | 0    | 470        | 4                                    | 270  | 1     | 0    | 275        | 8                             | 0    | 21    | 0    | 29         | 7                       | 0    | 10    | 0    | 17         | 791        |
| 05:15 PM      | 48                                   | 436  | 10    | 0    | 494        | 8                                    | 306  | 0     | 0    | 314        | 5                             | 0    | 23    | 0    | 28         | 8                       | 3    | 14    | 0    | 25         | 861        |
| 05:30 PM      | 39                                   | 432  | 12    | 0    | 483        | 4                                    | 316  | 0     | 0    | 320        | 3                             | 0    | 25    | 0    | 28         | 14                      | 2    | 12    | 0    | 28         | 859        |
| 05:45 PM      | 52                                   | 446  | 9     | 0    | 507        | 6                                    | 309  | 2     | 0    | 317        | 5                             | 1    | 27    | 0    | 33         | 8                       | 2    | 15    | 0    | 25         | 882        |
| Total         | 179                                  | 1737 | 38    | 0    | 1954       | 22                                   | 1201 | 3     | 0    | 1226       | 21                            | 1    | 96    | 0    | 118        | 37                      | 7    | 51    | 0    | 95         | 3393       |
| 06:00 PM      | 38                                   | 392  | 6     | 0    | 436        | 6                                    | 247  | 2     | 0    | 255        | 2                             | 0    | 17    | 0    | 19         | 8                       | 1    | 17    | 0    | 26         | 736        |
| 06:15 PM      | 40                                   | 386  | 8     | 0    | 434        | 9                                    | 278  | 2     | 0    | 289        | 3                             | 0    | 17    | 0    | 20         | 9                       | 1    | 9     | 0    | 19         | 762        |
| Grand Total   | 403                                  | 4686 | 85    | 0    | 5174       | 79                                   | 5609 | 10    | 0    | 5698       | 75                            | 9    | 372   | 0    | 456        | 131                     | 24   | 145   | 0    | 300        | 11628      |
| Apprch %      | 7.8                                  | 90.6 | 1.6   | 0    |            | 1.4                                  | 98.4 | 0.2   | 0    |            | 16.4                          | 2    | 81.6  | 0    |            | 43.7                    | 8    | 48.3  | 0    |            |            |
| Total %       | 3.5                                  | 40.3 | 0.7   | 0    | 44.5       | 0.7                                  | 48.2 | 0.1   | 0    | 49         | 0.6                           | 0.1  | 3.2   | 0    | 3.9        | 1.1                     | 0.2  | 1.2   | 0    | 2.6        |            |

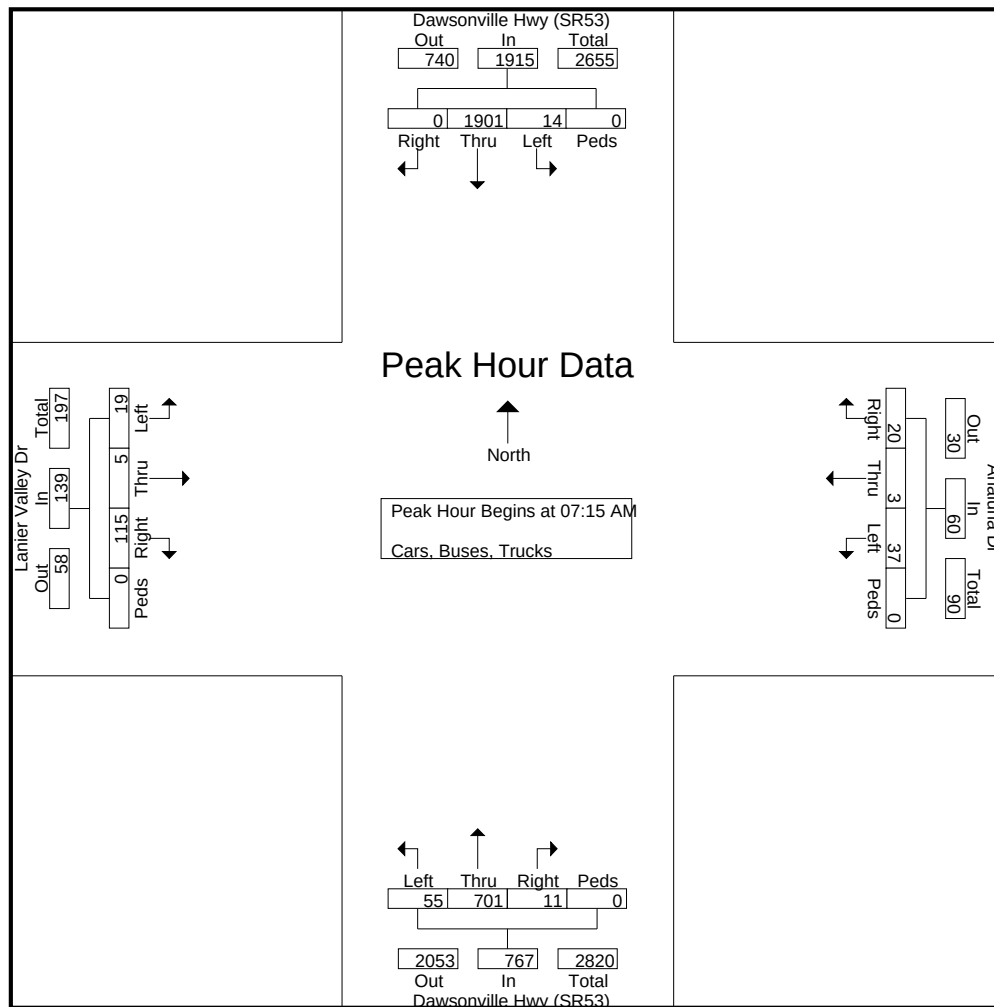
# Reliable Traffic Data Services, LLC

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TMC Data  
Dawsonville Hwy (SR53) @ Ahaluna Dr/  
Lanier Valley Dr, Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520005  
Site Code : 39520005  
Start Date : 11/17/2016  
Page No : 2

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Lanier Valley Dr<br>Eastbound |      |       |      |            | Ahaluna Dr<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|-------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Left                    | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                               |      |       |      |            |                         |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:15 AM       |                                      |      |       |      |            |                                      |      |       |      |            |                               |      |       |      |            |                         |      |       |      |            |            |
| 07:15 AM                                                   | 8                                    | 158  | 3     | 0    | 169        | 4                                    | 461  | 0     | 0    | 465        | 4                             | 0    | 31    | 0    | 35         | 10                      | 1    | 6     | 0    | 17         | 686        |
| 07:30 AM                                                   | 16                                   | 159  | 5     | 0    | 180        | 7                                    | 542  | 0     | 0    | 549        | 5                             | 1    | 32    | 0    | 38         | 13                      | 0    | 5     | 0    | 18         | 785        |
| 07:45 AM                                                   | 17                                   | 173  | 2     | 0    | 192        | 1                                    | 506  | 0     | 0    | 507        | 5                             | 2    | 29    | 0    | 36         | 5                       | 2    | 4     | 0    | 11         | 746        |
| 08:00 AM                                                   | 14                                   | 211  | 1     | 0    | 226        | 2                                    | 392  | 0     | 0    | 394        | 5                             | 2    | 23    | 0    | 30         | 9                       | 0    | 5     | 0    | 14         | 664        |
| Total Volume                                               | 55                                   | 701  | 11    | 0    | 767        | 14                                   | 1901 | 0     | 0    | 1915       | 19                            | 5    | 115   | 0    | 139        | 37                      | 3    | 20    | 0    | 60         | 2881       |
| % App. Total                                               | 7.2                                  | 91.4 | 1.4   | 0    |            | 0.7                                  | 99.3 | 0     | 0    |            | 13.7                          | 3.6  | 82.7  | 0    |            | 61.7                    | 5    | 33.3  | 0    |            |            |
| PHF                                                        | .809                                 | .831 | .550  | .000 | .848       | .500                                 | .877 | .000  | .000 | .872       | .950                          | .625 | .898  | .000 | .914       | .712                    | .375 | .833  | .000 | .833       | .918       |



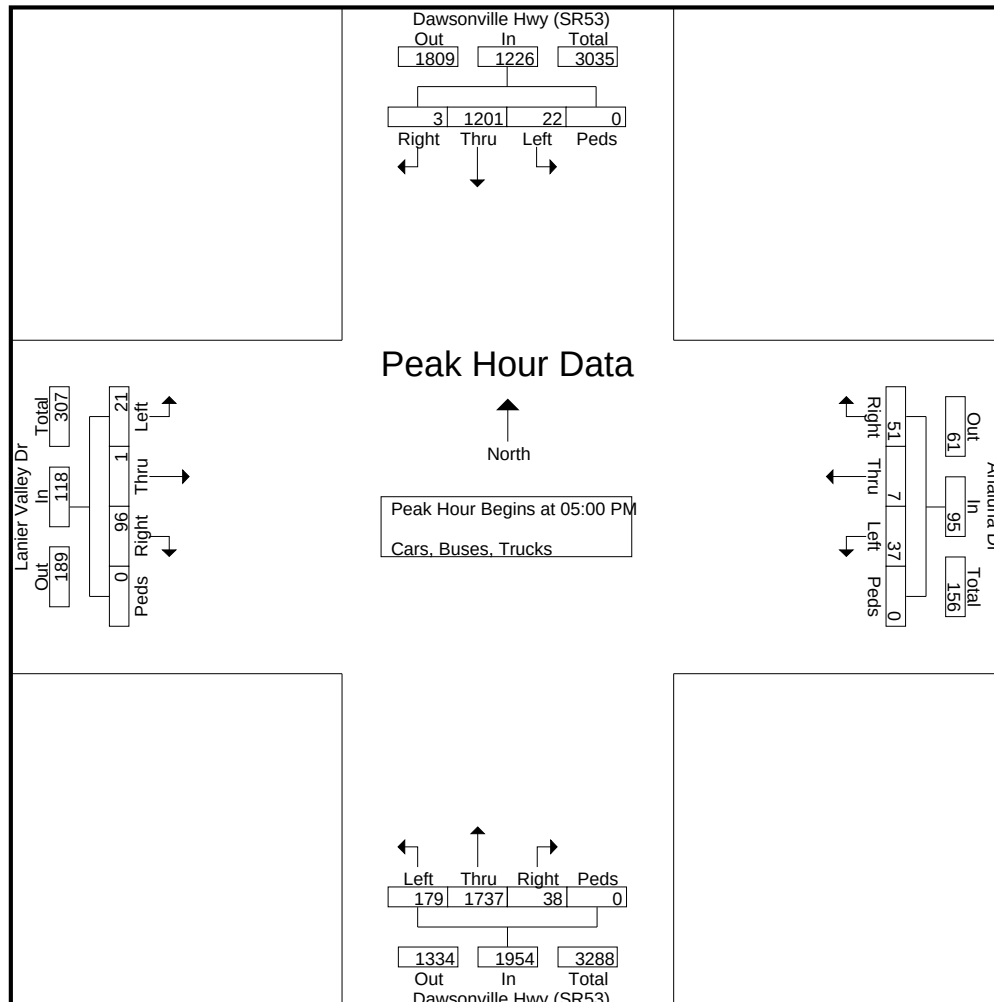
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TMC Data  
Dawsonville Hwy (SR53) @ Ahaluna Dr/  
Lanier Valley Dr, Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520005  
Site Code : 39520005  
Start Date : 11/17/2016  
Page No : 3

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Lanier Valley Dr<br>Eastbound |      |       |      |            | Ahaluna Dr<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|-------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Left                    | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                               |      |       |      |            |                         |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                                      |      |       |      |            |                                      |      |       |      |            |                               |      |       |      |            |                         |      |       |      |            |            |
| 05:00 PM                                                   | 40                                   | 423  | 7     | 0    | 470        | 4                                    | 270  | 1     | 0    | 275        | 8                             | 0    | 21    | 0    | 29         | 7                       | 0    | 10    | 0    | 17         | 791        |
| 05:15 PM                                                   | 48                                   | 436  | 10    | 0    | 494        | 8                                    | 306  | 0     | 0    | 314        | 5                             | 0    | 23    | 0    | 28         | 8                       | 3    | 14    | 0    | 25         | 861        |
| 05:30 PM                                                   | 39                                   | 432  | 12    | 0    | 483        | 4                                    | 316  | 0     | 0    | 320        | 3                             | 0    | 25    | 0    | 28         | 14                      | 2    | 12    | 0    | 28         | 859        |
| 05:45 PM                                                   | 52                                   | 446  | 9     | 0    | 507        | 6                                    | 309  | 2     | 0    | 317        | 5                             | 1    | 27    | 0    | 33         | 8                       | 2    | 15    | 0    | 25         | 882        |
| Total Volume                                               | 179                                  | 1737 | 38    | 0    | 1954       | 22                                   | 1201 | 3     | 0    | 1226       | 21                            | 1    | 96    | 0    | 118        | 37                      | 7    | 51    | 0    | 95         | 3393       |
| % App. Total                                               | 9.2                                  | 88.9 | 1.9   | 0    |            | 1.8                                  | 98   | 0.2   | 0    |            | 17.8                          | 0.8  | 81.4  | 0    |            | 38.9                    | 7.4  | 53.7  | 0    |            |            |
| PHF                                                        | .861                                 | .974 | .792  | .000 | .964       | .688                                 | .950 | .375  | .000 | .958       | .656                          | .250 | .889  | .000 | .894       | .661                    | .583 | .850  | .000 | .848       | .962       |



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TMC Data  
Dawsonville Hwy (SR53) @ North Lake  
Square Shopp Ctr Drwy, Gainesville, GA  
7-9am I 4-6pm

File Name : 40160001  
Site Code : 40160001  
Start Date : 3/22/2017  
Page No : 1

## Groups Printed- Cars, Buses, Trucks

|               | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Olive Garden/others Drwy<br>Eastbound |      |       |      |            | North Lake Square<br>Shopp Ctr Drwy<br>Westbound |      |       |      |            |            |
|---------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|---------------------------------------|------|-------|------|------------|--------------------------------------------------|------|-------|------|------------|------------|
| Start Time    | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                                  | Thru | Right | Peds | App. Total | Left                                             | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 1                                    | 155  | 4     | 0    | 160        | 1                                    | 367  | 0     | 0    | 368        | 1                                     | 0    | 1     | 0    | 2          | 0                                                | 0    | 0     | 0    | 0          | 530        |
| 07:15 AM      | 1                                    | 163  | 1     | 0    | 165        | 0                                    | 489  | 0     | 0    | 489        | 1                                     | 0    | 1     | 0    | 2          | 0                                                | 0    | 0     | 0    | 0          | 656        |
| 07:30 AM      | 4                                    | 174  | 1     | 0    | 179        | 1                                    | 552  | 0     | 0    | 553        | 1                                     | 0    | 2     | 0    | 3          | 0                                                | 0    | 0     | 0    | 0          | 735        |
| 07:45 AM      | 2                                    | 189  | 3     | 0    | 194        | 1                                    | 536  | 3     | 0    | 540        | 0                                     | 0    | 1     | 0    | 1          | 1                                                | 0    | 0     | 0    | 1          | 736        |
| Total         | 8                                    | 681  | 9     | 0    | 698        | 3                                    | 1944 | 3     | 0    | 1950       | 3                                     | 0    | 5     | 0    | 8          | 1                                                | 0    | 0     | 0    | 1          | 2657       |
| 08:00 AM      | 4                                    | 214  | 4     | 0    | 222        | 3                                    | 412  | 1     | 0    | 416        | 0                                     | 0    | 2     | 0    | 2          | 1                                                | 0    | 0     | 0    | 1          | 641        |
| 08:15 AM      | 2                                    | 206  | 2     | 0    | 210        | 1                                    | 429  | 3     | 0    | 433        | 1                                     | 0    | 1     | 0    | 2          | 0                                                | 0    | 0     | 0    | 0          | 645        |
| 08:30 AM      | 0                                    | 197  | 7     | 0    | 204        | 1                                    | 358  | 0     | 0    | 359        | 0                                     | 0    | 0     | 0    | 0          | 3                                                | 0    | 1     | 0    | 4          | 567        |
| 08:45 AM      | 3                                    | 185  | 8     | 0    | 196        | 1                                    | 337  | 1     | 0    | 339        | 0                                     | 0    | 3     | 0    | 3          | 3                                                | 0    | 2     | 0    | 5          | 543        |
| Total         | 9                                    | 802  | 21    | 0    | 832        | 6                                    | 1536 | 5     | 0    | 1547       | 1                                     | 0    | 6     | 0    | 7          | 7                                                | 0    | 3     | 0    | 10         | 2396       |
| *** BREAK *** |                                      |      |       |      |            |                                      |      |       |      |            |                                       |      |       |      |            |                                                  |      |       |      |            |            |
| 04:00 PM      | 12                                   | 376  | 29    | 0    | 417        | 7                                    | 274  | 2     | 0    | 283        | 1                                     | 1    | 12    | 0    | 14         | 28                                               | 0    | 9     | 0    | 37         | 751        |
| 04:15 PM      | 11                                   | 382  | 30    | 0    | 423        | 11                                   | 277  | 4     | 0    | 292        | 2                                     | 0    | 15    | 0    | 17         | 48                                               | 0    | 8     | 0    | 56         | 788        |
| 04:30 PM      | 19                                   | 396  | 38    | 0    | 453        | 8                                    | 285  | 5     | 0    | 298        | 2                                     | 2    | 6     | 0    | 10         | 30                                               | 0    | 11    | 0    | 41         | 802        |
| 04:45 PM      | 22                                   | 435  | 32    | 0    | 489        | 6                                    | 287  | 5     | 0    | 298        | 7                                     | 0    | 16    | 0    | 23         | 32                                               | 2    | 10    | 0    | 44         | 854        |
| Total         | 64                                   | 1589 | 129   | 0    | 1782       | 32                                   | 1123 | 16    | 0    | 1171       | 12                                    | 3    | 49    | 0    | 64         | 138                                              | 2    | 38    | 0    | 178        | 3195       |
| 05:00 PM      | 28                                   | 433  | 39    | 0    | 500        | 1                                    | 287  | 5     | 0    | 293        | 4                                     | 1    | 14    | 0    | 19         | 25                                               | 1    | 5     | 0    | 31         | 843        |
| 05:15 PM      | 18                                   | 439  | 24    | 0    | 481        | 6                                    | 296  | 7     | 0    | 309        | 3                                     | 2    | 12    | 0    | 17         | 31                                               | 2    | 11    | 0    | 44         | 851        |
| 05:30 PM      | 16                                   | 447  | 37    | 0    | 500        | 4                                    | 312  | 6     | 0    | 322        | 1                                     | 0    | 19    | 0    | 20         | 35                                               | 3    | 14    | 0    | 52         | 894        |
| 05:45 PM      | 25                                   | 444  | 38    | 0    | 507        | 8                                    | 304  | 9     | 0    | 321        | 5                                     | 0    | 15    | 0    | 20         | 27                                               | 1    | 12    | 0    | 40         | 888        |
| Total         | 87                                   | 1763 | 138   | 0    | 1988       | 19                                   | 1199 | 27    | 0    | 1245       | 13                                    | 3    | 60    | 0    | 76         | 118                                              | 7    | 42    | 0    | 167        | 3476       |
| Grand Total   | 168                                  | 4835 | 297   | 0    | 5300       | 60                                   | 5802 | 51    | 0    | 5913       | 29                                    | 6    | 120   | 0    | 155        | 264                                              | 9    | 83    | 0    | 356        | 11724      |
| Apprch %      | 3.2                                  | 91.2 | 5.6   | 0    |            | 1                                    | 98.1 | 0.9   | 0    |            | 18.7                                  | 3.9  | 77.4  | 0    |            | 74.2                                             | 2.5  | 23.3  | 0    |            |            |
| Total %       | 1.4                                  | 41.2 | 2.5   | 0    | 45.2       | 0.5                                  | 49.5 | 0.4   | 0    | 50.4       | 0.2                                   | 0.1  | 1     | 0    | 1.3        | 2.3                                              | 0.1  | 0.7   | 0    | 3          |            |

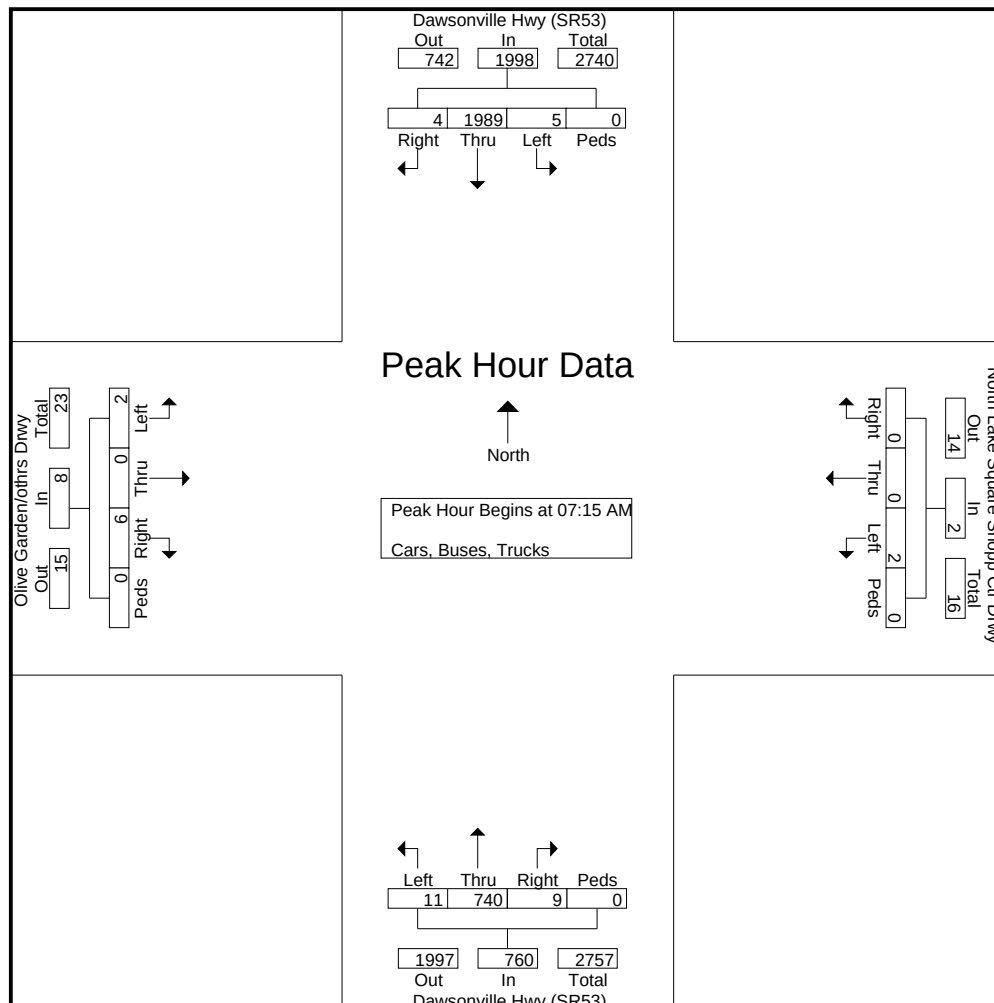
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TMC Data  
Dawsonville Hwy (SR53) @ North Lake  
Square Shopp Ctr Drwy, Gainesville, GA  
7-9am I 4-6pm

File Name : 40160001  
Site Code : 40160001  
Start Date : 3/22/2017  
Page No : 2

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Olive Garden/others Drwy<br>Eastbound |      |       |      |            | North Lake Square<br>Shopp Ctr Drwy<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|---------------------------------------|------|-------|------|------------|--------------------------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                                  | Thru | Right | Peds | App. Total | Left                                             | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                                       |      |       |      |            |                                                  |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:15 AM       |                                      |      |       |      |            |                                      |      |       |      |            |                                       |      |       |      |            |                                                  |      |       |      |            |            |
| 07:15 AM                                                   | 1                                    | 163  | 1     | 0    | 165        | 0                                    | 489  | 0     | 0    | 489        | 1                                     | 0    | 1     | 0    | 2          | 0                                                | 0    | 0     | 0    | 0          | 656        |
| 07:30 AM                                                   | 4                                    | 174  | 1     | 0    | 179        | 1                                    | 552  | 0     | 0    | 553        | 1                                     | 0    | 2     | 0    | 3          | 0                                                | 0    | 0     | 0    | 0          | 735        |
| 07:45 AM                                                   | 2                                    | 189  | 3     | 0    | 194        | 1                                    | 536  | 3     | 0    | 540        | 0                                     | 0    | 1     | 0    | 1          | 1                                                | 0    | 0     | 0    | 1          | 736        |
| 08:00 AM                                                   | 4                                    | 214  | 4     | 0    | 222        | 3                                    | 412  | 1     | 0    | 416        | 0                                     | 0    | 2     | 0    | 2          | 1                                                | 0    | 0     | 0    | 1          | 641        |
| Total Volume                                               | 11                                   | 740  | 9     | 0    | 760        | 5                                    | 1989 | 4     | 0    | 1998       | 2                                     | 0    | 6     | 0    | 8          | 2                                                | 0    | 0     | 0    | 2          | 2768       |
| % App. Total                                               | 1.4                                  | 97.4 | 1.2   | 0    |            | 0.3                                  | 99.5 | 0.2   | 0    |            | 25                                    | 0    | 75    | 0    |            | 100                                              | 0    | 0     | 0    |            |            |
| PHF                                                        | .688                                 | .864 | .563  | .000 | .856       | .417                                 | .901 | .333  | .000 | .903       | .500                                  | .000 | .750  | .000 | .667       | .500                                             | .000 | .000  | .000 | .500       | .940       |





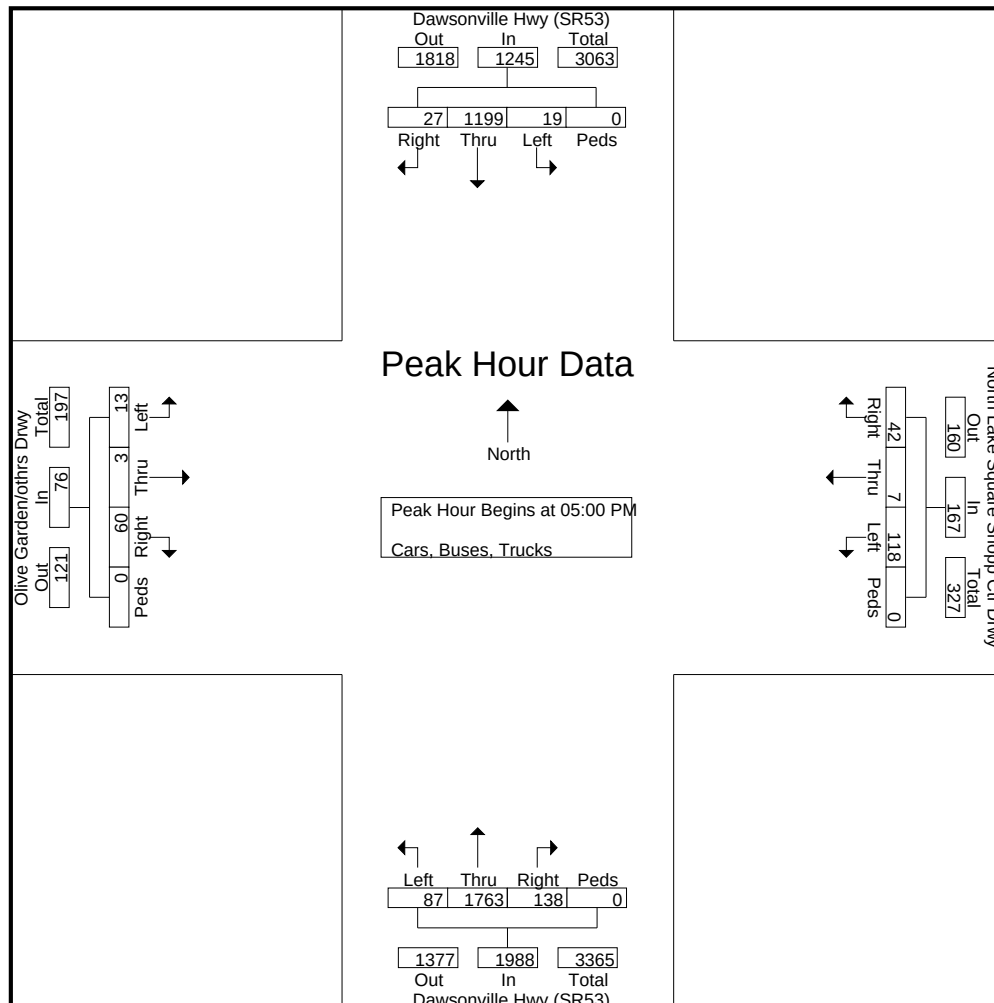
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TMC Data  
Dawsonville Hwy (SR53) @ North Lake  
Square Shopp Ctr Drwy, Gainesville, GA  
7-9am I 4-6pm

File Name : 40160001  
Site Code : 40160001  
Start Date : 3/22/2017  
Page No : 3

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Olive Garden/others Drwy<br>Eastbound |      |       |      |            | North Lake Square<br>Shopp Ctr Drwy<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|---------------------------------------|------|-------|------|------------|--------------------------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                                  | Thru | Right | Peds | App. Total | Left                                             | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                                       |      |       |      |            |                                                  |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                                      |      |       |      |            |                                      |      |       |      |            |                                       |      |       |      |            |                                                  |      |       |      |            |            |
| 05:00 PM                                                   | 28                                   | 433  | 39    | 0    | 500        | 1                                    | 287  | 5     | 0    | 293        | 4                                     | 1    | 14    | 0    | 19         | 25                                               | 1    | 5     | 0    | 31         | 843        |
| 05:15 PM                                                   | 18                                   | 439  | 24    | 0    | 481        | 6                                    | 296  | 7     | 0    | 309        | 3                                     | 2    | 12    | 0    | 17         | 31                                               | 2    | 11    | 0    | 44         | 851        |
| 05:30 PM                                                   | 16                                   | 447  | 37    | 0    | 500        | 4                                    | 312  | 6     | 0    | 322        | 1                                     | 0    | 19    | 0    | 20         | 35                                               | 3    | 14    | 0    | 52         | 894        |
| 05:45 PM                                                   | 25                                   | 444  | 38    | 0    | 507        | 8                                    | 304  | 9     | 0    | 321        | 5                                     | 0    | 15    | 0    | 20         | 27                                               | 1    | 12    | 0    | 40         | 888        |
| Total Volume                                               | 87                                   | 1763 | 138   | 0    | 1988       | 19                                   | 1199 | 27    | 0    | 1245       | 13                                    | 3    | 60    | 0    | 76         | 118                                              | 7    | 42    | 0    | 167        | 3476       |
| % App. Total                                               | 4.4                                  | 88.7 | 6.9   | 0    |            | 1.5                                  | 96.3 | 2.2   | 0    |            | 17.1                                  | 3.9  | 78.9  | 0    |            | 70.7                                             | 4.2  | 25.1  | 0    |            |            |
| PHF                                                        | .777                                 | .986 | .885  | .000 | .980       | .594                                 | .961 | .750  | .000 | .967       | .650                                  | .375 | .789  | .000 | .950       | .843                                             | .583 | .750  | .000 | .803       | .972       |



# Reliable Traffic Data Services, LLC

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TMC Data  
Dawsonville Hwy (SR53) @ Beechwood Blvd  
Gainesville, GA  
7-9am I 4.30-6.30pm

File Name : 39520006  
Site Code : 39520006  
Start Date : 11/17/2016  
Page No : 1

## Groups Printed- Cars, Buses, Trucks

|               | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Beechwood Blvd<br>Eastbound |      |       |      |            | Commercial Drwy<br>(Closed)<br>Westbound |      |       |      |            |            |
|---------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|-----------------------------|------|-------|------|------------|------------------------------------------|------|-------|------|------------|------------|
| Start Time    | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                        | Thru | Right | Peds | App. Total | Left                                     | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 2                                    | 167  | 0     | 0    | 169        | 0                                    | 367  | 2     | 0    | 369        | 1                           | 0    | 10    | 0    | 11         | 0                                        | 0    | 0     | 0    | 0          | 549        |
| 07:15 AM      | 6                                    | 172  | 0     | 0    | 178        | 0                                    | 492  | 1     | 0    | 493        | 1                           | 0    | 9     | 0    | 10         | 0                                        | 0    | 0     | 0    | 0          | 681        |
| 07:30 AM      | 8                                    | 187  | 0     | 0    | 195        | 0                                    | 564  | 0     | 0    | 564        | 0                           | 0    | 12    | 0    | 12         | 0                                        | 0    | 0     | 0    | 0          | 771        |
| 07:45 AM      | 5                                    | 203  | 0     | 0    | 208        | 0                                    | 535  | 1     | 0    | 536        | 3                           | 0    | 11    | 0    | 14         | 0                                        | 0    | 0     | 0    | 0          | 758        |
| Total         | 21                                   | 729  | 0     | 0    | 750        | 0                                    | 1958 | 4     | 0    | 1962       | 5                           | 0    | 42    | 0    | 47         | 0                                        | 0    | 0     | 0    | 0          | 2759       |
| 08:00 AM      | 8                                    | 225  | 0     | 0    | 233        | 0                                    | 415  | 0     | 0    | 415        | 1                           | 0    | 9     | 0    | 10         | 0                                        | 0    | 0     | 0    | 0          | 658        |
| 08:15 AM      | 5                                    | 203  | 0     | 0    | 208        | 0                                    | 441  | 0     | 0    | 441        | 0                           | 0    | 3     | 0    | 3          | 0                                        | 0    | 0     | 0    | 0          | 652        |
| 08:30 AM      | 3                                    | 198  | 0     | 0    | 201        | 0                                    | 365  | 2     | 0    | 367        | 0                           | 0    | 11    | 0    | 11         | 0                                        | 0    | 0     | 0    | 0          | 579        |
| 08:45 AM      | 3                                    | 192  | 0     | 0    | 195        | 0                                    | 341  | 1     | 0    | 342        | 1                           | 0    | 3     | 0    | 4          | 0                                        | 0    | 0     | 0    | 0          | 541        |
| Total         | 19                                   | 818  | 0     | 0    | 837        | 0                                    | 1562 | 3     | 0    | 1565       | 2                           | 0    | 26    | 0    | 28         | 0                                        | 0    | 0     | 0    | 0          | 2430       |
| *** BREAK *** |                                      |      |       |      |            |                                      |      |       |      |            |                             |      |       |      |            |                                          |      |       |      |            |            |
| 04:30 PM      | 16                                   | 443  | 0     | 0    | 459        | 0                                    | 312  | 1     | 0    | 313        | 0                           | 0    | 14    | 0    | 14         | 0                                        | 0    | 0     | 0    | 0          | 786        |
| 04:45 PM      | 15                                   | 497  | 0     | 0    | 512        | 0                                    | 327  | 0     | 0    | 327        | 0                           | 0    | 9     | 0    | 9          | 0                                        | 0    | 0     | 0    | 0          | 848        |
| Total         | 31                                   | 940  | 0     | 0    | 971        | 0                                    | 639  | 1     | 0    | 640        | 0                           | 0    | 23    | 0    | 23         | 0                                        | 0    | 0     | 0    | 0          | 1634       |
| 05:00 PM      | 18                                   | 488  | 0     | 0    | 506        | 0                                    | 347  | 0     | 0    | 347        | 0                           | 0    | 5     | 0    | 5          | 0                                        | 0    | 0     | 0    | 0          | 858        |
| 05:15 PM      | 20                                   | 506  | 0     | 0    | 526        | 0                                    | 354  | 3     | 0    | 357        | 0                           | 0    | 17    | 0    | 17         | 0                                        | 0    | 0     | 0    | 0          | 900        |
| 05:30 PM      | 31                                   | 494  | 0     | 0    | 525        | 0                                    | 346  | 0     | 0    | 346        | 0                           | 0    | 10    | 0    | 10         | 0                                        | 0    | 0     | 0    | 0          | 881        |
| 05:45 PM      | 17                                   | 510  | 0     | 0    | 527        | 0                                    | 341  | 6     | 0    | 347        | 1                           | 0    | 15    | 0    | 16         | 0                                        | 0    | 0     | 0    | 0          | 890        |
| Total         | 86                                   | 1998 | 0     | 0    | 2084       | 0                                    | 1388 | 9     | 0    | 1397       | 1                           | 0    | 47    | 0    | 48         | 0                                        | 0    | 0     | 0    | 0          | 3529       |
| 06:00 PM      | 23                                   | 484  | 0     | 0    | 507        | 0                                    | 338  | 1     | 0    | 339        | 1                           | 0    | 9     | 0    | 10         | 0                                        | 0    | 0     | 0    | 0          | 856        |
| 06:15 PM      | 19                                   | 468  | 0     | 0    | 487        | 0                                    | 323  | 2     | 0    | 325        | 1                           | 0    | 14    | 0    | 15         | 0                                        | 0    | 0     | 0    | 0          | 827        |
| Grand Total   | 199                                  | 5437 | 0     | 0    | 5636       | 0                                    | 6208 | 20    | 0    | 6228       | 10                          | 0    | 161   | 0    | 171        | 0                                        | 0    | 0     | 0    | 0          | 12035      |
| Apprch %      | 3.5                                  | 96.5 | 0     | 0    |            | 0                                    | 99.7 | 0.3   | 0    |            | 5.8                         | 0    | 94.2  | 0    |            | 0                                        | 0    | 0     | 0    | 0          |            |
| Total %       | 1.7                                  | 45.2 | 0     | 0    | 46.8       | 0                                    | 51.6 | 0.2   | 0    | 51.7       | 0.1                         | 0    | 1.3   | 0    | 1.4        | 0                                        | 0    | 0     | 0    | 0          |            |

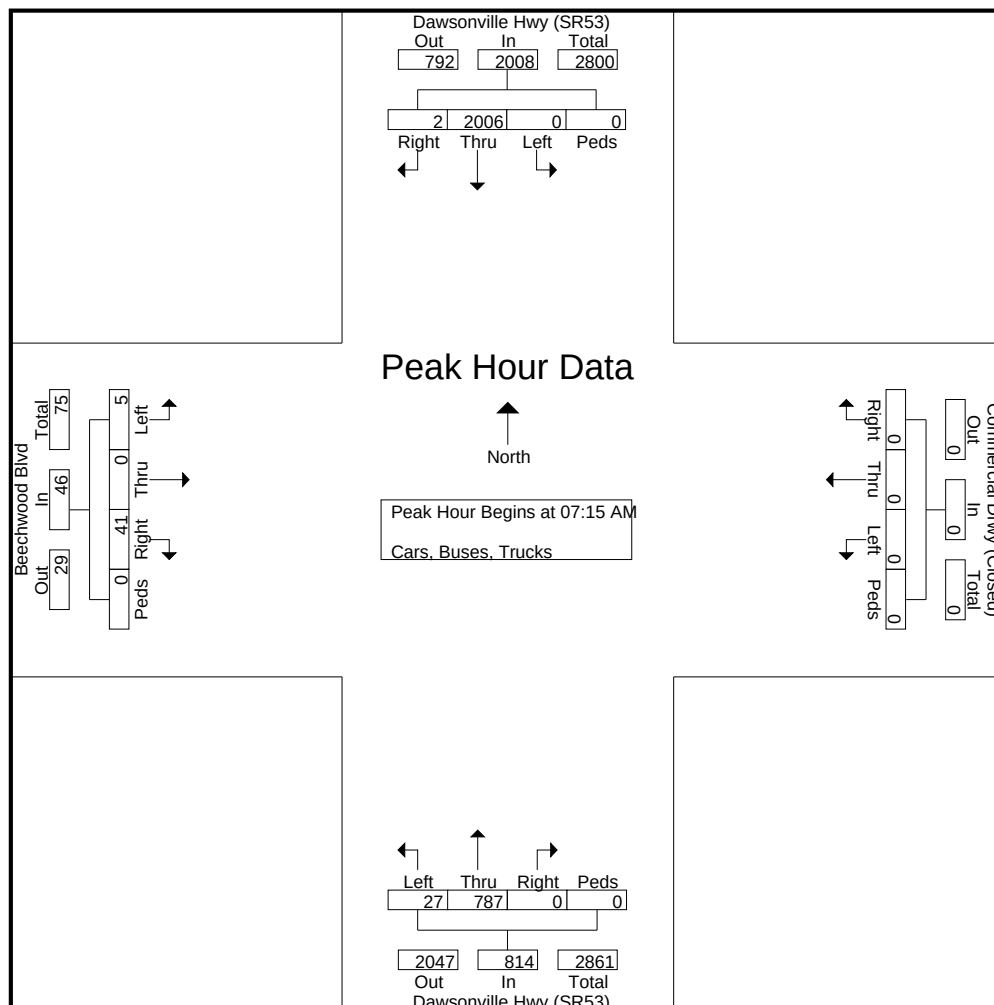
# Reliable Traffic Data Services, LLC

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TMC Data  
Dawsonville Hwy (SR53) @ Beechwood Blvd  
Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520006  
Site Code : 39520006  
Start Date : 11/17/2016  
Page No : 2

|                                                            | Dawsonville Hwy (SR53) Northbound |      |       |      |            | Dawsonville Hwy (SR53) Southbound |      |       |      |            | Beechwood Blvd Eastbound |      |       |      |            | Commercial Drwy (Closed) Westbound |      |       |      |            |            |
|------------------------------------------------------------|-----------------------------------|------|-------|------|------------|-----------------------------------|------|-------|------|------------|--------------------------|------|-------|------|------------|------------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                              | Thru | Right | Peds | App. Total | Left                              | Thru | Right | Peds | App. Total | Left                     | Thru | Right | Peds | App. Total | Left                               | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                                   |      |       |      |            |                                   |      |       |      |            |                          |      |       |      |            |                                    |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:15 AM       |                                   |      |       |      |            |                                   |      |       |      |            |                          |      |       |      |            |                                    |      |       |      |            |            |
| 07:15 AM                                                   | 6                                 | 172  | 0     | 0    | 178        | 0                                 | 492  | 1     | 0    | 493        | 1                        | 0    | 9     | 0    | 10         | 0                                  | 0    | 0     | 0    | 0          | 681        |
| 07:30 AM                                                   | 8                                 | 187  | 0     | 0    | 195        | 0                                 | 564  | 0     | 0    | 564        | 0                        | 0    | 12    | 0    | 12         | 0                                  | 0    | 0     | 0    | 0          | 771        |
| 07:45 AM                                                   | 5                                 | 203  | 0     | 0    | 208        | 0                                 | 535  | 1     | 0    | 536        | 3                        | 0    | 11    | 0    | 14         | 0                                  | 0    | 0     | 0    | 0          | 758        |
| 08:00 AM                                                   | 8                                 | 225  | 0     | 0    | 233        | 0                                 | 415  | 0     | 0    | 415        | 1                        | 0    | 9     | 0    | 10         | 0                                  | 0    | 0     | 0    | 0          | 658        |
| Total Volume                                               | 27                                | 787  | 0     | 0    | 814        | 0                                 | 2006 | 2     | 0    | 2008       | 5                        | 0    | 41    | 0    | 46         | 0                                  | 0    | 0     | 0    | 0          | 2868       |
| % App. Total                                               | 3.3                               | 96.7 | 0     | 0    |            | 0                                 | 99.9 | 0.1   | 0    |            | 10.9                     | 0    | 89.1  | 0    |            | 0                                  | 0    | 0     | 0    |            |            |
| PHF                                                        | .844                              | .874 | .000  | .000 | .873       | .000                              | .889 | .500  | .000 | .890       | .417                     | .000 | .854  | .000 | .821       | .000                               | .000 | .000  | .000 | .000       | .930       |



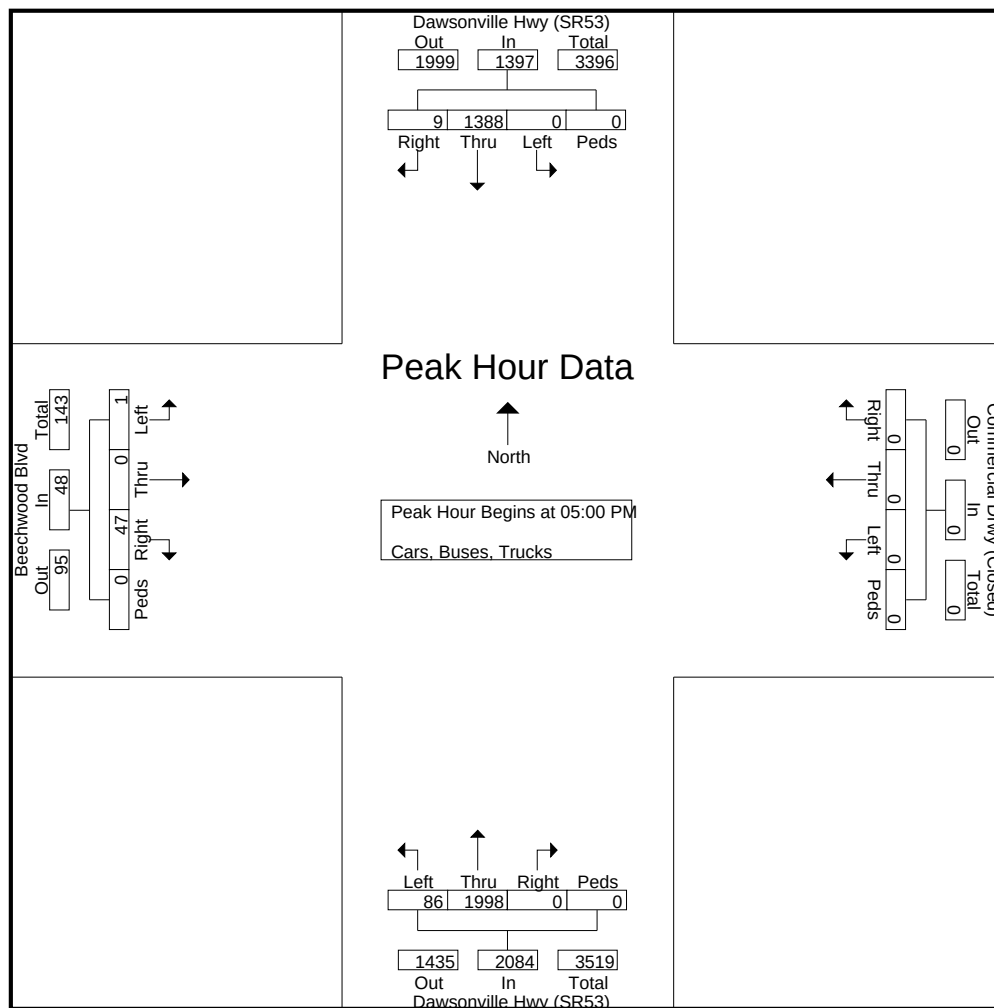
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TMC Data  
Dawsonville Hwy (SR53) @ Beechwood Blvd  
Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520006  
Site Code : 39520006  
Start Date : 11/17/2016  
Page No : 3

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Beechwood Blvd<br>Eastbound |      |       |      |            | Commercial Drwy<br>(Closed)<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|-----------------------------|------|-------|------|------------|------------------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                        | Thru | Right | Peds | App. Total | Left                                     | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                             |      |       |      |            |                                          |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                                      |      |       |      |            |                                      |      |       |      |            |                             |      |       |      |            |                                          |      |       |      |            |            |
| 05:00 PM                                                   | 18                                   | 488  | 0     | 0    | 506        | 0                                    | 347  | 0     | 0    | 347        | 0                           | 0    | 5     | 0    | 5          | 0                                        | 0    | 0     | 0    | 0          | 858        |
| 05:15 PM                                                   | 20                                   | 506  | 0     | 0    | 526        | 0                                    | 354  | 3     | 0    | 357        | 0                           | 0    | 17    | 0    | 17         | 0                                        | 0    | 0     | 0    | 0          | 900        |
| 05:30 PM                                                   | 31                                   | 494  | 0     | 0    | 525        | 0                                    | 346  | 0     | 0    | 346        | 0                           | 0    | 10    | 0    | 10         | 0                                        | 0    | 0     | 0    | 0          | 881        |
| 05:45 PM                                                   | 17                                   | 510  | 0     | 0    | 527        | 0                                    | 341  | 6     | 0    | 347        | 1                           | 0    | 15    | 0    | 16         | 0                                        | 0    | 0     | 0    | 0          | 890        |
| Total Volume                                               | 86                                   | 1998 | 0     | 0    | 2084       | 0                                    | 1388 | 9     | 0    | 1397       | 1                           | 0    | 47    | 0    | 48         | 0                                        | 0    | 0     | 0    | 0          | 3529       |
| % App. Total                                               | 4.1                                  | 95.9 | 0     | 0    |            | 0                                    | 99.4 | 0.6   | 0    |            | 2.1                         | 0    | 97.9  | 0    |            | 0                                        | 0    | 0     | 0    |            |            |
| PHF                                                        | .694                                 | .979 | .000  | .000 | .989       | .000                                 | .980 | .375  | .000 | .978       | .250                        | .000 | .691  | .000 | .706       | .000                                     | .000 | .000  | .000 | .000       | .980       |



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TMC Data  
Dawsonville Hwy (SR53) @ McEver Rd  
Gainesville, GA  
7-9am I 4.30-6.30pm

File Name : 39520007  
Site Code : 39520007  
Start Date : 11/17/2016  
Page No : 1

## Groups Printed- Cars, Buses, Trucks

|               | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | McEver Rd<br>Eastbound |      |       |      |            | Home Depot Drwy<br>Westbound |      |       |      |            |            |
|---------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|------------|
| Start Time    | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                   | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 58                                   | 98   | 3     | 0    | 159        | 2                                    | 206  | 164   | 0    | 372        | 67                     | 4    | 48    | 0    | 119        | 4                            | 2    | 4     | 0    | 10         | 660        |
| 07:15 AM      | 67                                   | 104  | 7     | 0    | 178        | 5                                    | 276  | 187   | 0    | 468        | 93                     | 4    | 88    | 0    | 185        | 8                            | 1    | 2     | 0    | 11         | 842        |
| 07:30 AM      | 72                                   | 110  | 15    | 0    | 197        | 6                                    | 317  | 236   | 0    | 559        | 99                     | 7    | 82    | 0    | 188        | 7                            | 4    | 3     | 0    | 14         | 958        |
| 07:45 AM      | 78                                   | 115  | 18    | 0    | 211        | 10                                   | 325  | 226   | 0    | 561        | 96                     | 6    | 93    | 0    | 195        | 15                           | 4    | 3     | 0    | 22         | 989        |
| Total         | 275                                  | 427  | 43    | 0    | 745        | 23                                   | 1124 | 813   | 0    | 1960       | 355                    | 21   | 311   | 0    | 687        | 34                           | 11   | 12    | 0    | 57         | 3449       |
| 08:00 AM      | 65                                   | 136  | 15    | 0    | 216        | 7                                    | 252  | 179   | 0    | 438        | 102                    | 11   | 79    | 0    | 192        | 12                           | 10   | 10    | 0    | 32         | 878        |
| 08:15 AM      | 66                                   | 121  | 20    | 0    | 207        | 14                                   | 264  | 153   | 0    | 431        | 83                     | 14   | 67    | 0    | 164        | 14                           | 6    | 10    | 0    | 30         | 832        |
| 08:30 AM      | 51                                   | 118  | 21    | 0    | 190        | 20                                   | 233  | 146   | 0    | 399        | 85                     | 16   | 72    | 0    | 173        | 20                           | 8    | 6     | 0    | 34         | 796        |
| 08:45 AM      | 57                                   | 106  | 29    | 0    | 192        | 15                                   | 221  | 108   | 0    | 344        | 102                    | 14   | 81    | 0    | 197        | 18                           | 5    | 10    | 0    | 33         | 766        |
| Total         | 239                                  | 481  | 85    | 0    | 805        | 56                                   | 970  | 586   | 0    | 1612       | 372                    | 55   | 299   | 0    | 726        | 64                           | 29   | 36    | 0    | 129        | 3272       |
| *** BREAK *** |                                      |      |       |      |            |                                      |      |       |      |            |                        |      |       |      |            |                              |      |       |      |            |            |
| 04:30 PM      | 94                                   | 286  | 16    | 0    | 396        | 11                                   | 242  | 90    | 0    | 343        | 178                    | 35   | 78    | 0    | 291        | 30                           | 33   | 19    | 0    | 82         | 1112       |
| 04:45 PM      | 109                                  | 312  | 12    | 0    | 433        | 9                                    | 213  | 112   | 0    | 334        | 215                    | 37   | 93    | 0    | 345        | 31                           | 27   | 21    | 0    | 79         | 1191       |
| Total         | 203                                  | 598  | 28    | 0    | 829        | 20                                   | 455  | 202   | 0    | 677        | 393                    | 72   | 171   | 0    | 636        | 61                           | 60   | 40    | 0    | 161        | 2303       |
| 05:00 PM      | 108                                  | 352  | 17    | 0    | 477        | 15                                   | 257  | 115   | 0    | 387        | 178                    | 42   | 122   | 0    | 342        | 27                           | 19   | 17    | 0    | 63         | 1269       |
| 05:15 PM      | 101                                  | 335  | 11    | 0    | 447        | 12                                   | 259  | 137   | 0    | 408        | 224                    | 63   | 74    | 0    | 361        | 10                           | 33   | 19    | 0    | 62         | 1278       |
| 05:30 PM      | 114                                  | 327  | 10    | 0    | 451        | 17                                   | 216  | 110   | 0    | 343        | 227                    | 59   | 95    | 0    | 381        | 22                           | 21   | 16    | 0    | 59         | 1234       |
| 05:45 PM      | 110                                  | 348  | 8     | 0    | 466        | 18                                   | 297  | 119   | 0    | 434        | 216                    | 49   | 95    | 0    | 360        | 28                           | 18   | 29    | 0    | 75         | 1335       |
| Total         | 433                                  | 1362 | 46    | 0    | 1841       | 62                                   | 1029 | 481   | 0    | 1572       | 845                    | 213  | 386   | 0    | 1444       | 87                           | 91   | 81    | 0    | 259        | 5116       |
| 06:00 PM      | 106                                  | 292  | 15    | 0    | 413        | 22                                   | 236  | 102   | 0    | 360        | 230                    | 24   | 88    | 0    | 342        | 32                           | 18   | 28    | 0    | 78         | 1193       |
| 06:15 PM      | 98                                   | 290  | 12    | 0    | 400        | 11                                   | 238  | 86    | 0    | 335        | 191                    | 16   | 92    | 0    | 299        | 29                           | 14   | 12    | 0    | 55         | 1089       |
| Grand Total   | 1354                                 | 3450 | 229   | 0    | 5033       | 194                                  | 4052 | 2270  | 0    | 6516       | 2386                   | 401  | 1347  | 0    | 4134       | 307                          | 223  | 209   | 0    | 739        | 16422      |
| Apprch %      | 26.9                                 | 68.5 | 4.5   | 0    |            | 3                                    | 62.2 | 34.8  | 0    |            | 57.7                   | 9.7  | 32.6  | 0    |            | 41.5                         | 30.2 | 28.3  | 0    |            |            |
| Total %       | 8.2                                  | 21   | 1.4   | 0    | 30.6       | 1.2                                  | 24.7 | 13.8  | 0    | 39.7       | 14.5                   | 2.4  | 8.2   | 0    | 25.2       | 1.9                          | 1.4  | 1.3   | 0    | 4.5        |            |

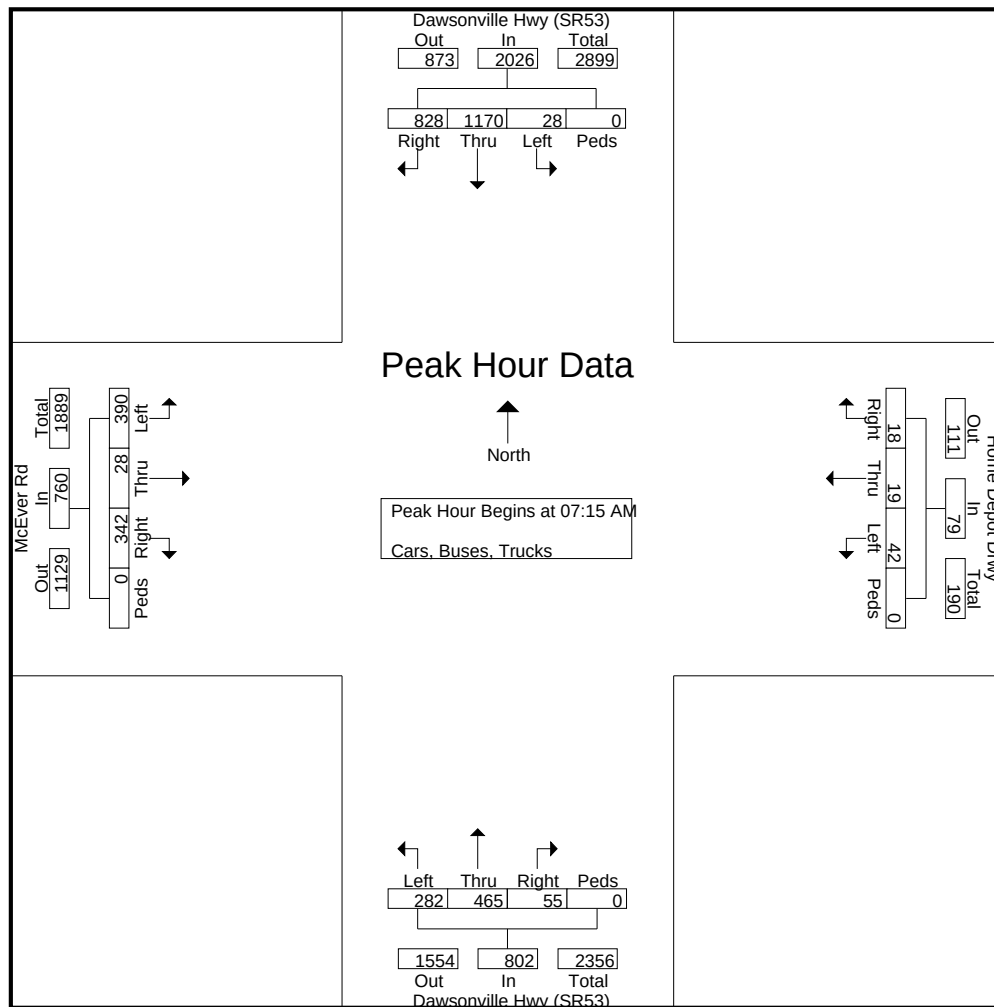
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TMC Data  
Dawsonville Hwy (SR53) @ McEver Rd  
Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520007  
Site Code : 39520007  
Start Date : 11/17/2016  
Page No : 2

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | McEver Rd<br>Eastbound |      |       |      |            | Home Depot Drwy<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                   | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                        |      |       |      |            |                              |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:15 AM       |                                      |      |       |      |            |                                      |      |       |      |            |                        |      |       |      |            |                              |      |       |      |            |            |
| 07:15 AM                                                   | 67                                   | 104  | 7     | 0    | 178        | 5                                    | 276  | 187   | 0    | 468        | 93                     | 4    | 88    | 0    | 185        | 8                            | 1    | 2     | 0    | 11         | 842        |
| 07:30 AM                                                   | 72                                   | 110  | 15    | 0    | 197        | 6                                    | 317  | 236   | 0    | 559        | 99                     | 7    | 82    | 0    | 188        | 7                            | 4    | 3     | 0    | 14         | 958        |
| 07:45 AM                                                   | 78                                   | 115  | 18    | 0    | 211        | 10                                   | 325  | 226   | 0    | 561        | 96                     | 6    | 93    | 0    | 195        | 15                           | 4    | 3     | 0    | 22         | 989        |
| 08:00 AM                                                   | 65                                   | 136  | 15    | 0    | 216        | 7                                    | 252  | 179   | 0    | 438        | 102                    | 11   | 79    | 0    | 192        | 12                           | 10   | 10    | 0    | 32         | 878        |
| Total Volume                                               | 282                                  | 465  | 55    | 0    | 802        | 28                                   | 1170 | 828   | 0    | 2026       | 390                    | 28   | 342   | 0    | 760        | 42                           | 19   | 18    | 0    | 79         | 3667       |
| % App. Total                                               | 35.2                                 | 58   | 6.9   | 0    |            | 1.4                                  | 57.7 | 40.9  | 0    |            | 51.3                   | 3.7  | 45    | 0    |            | 53.2                         | 24.1 | 22.8  | 0    |            |            |
| PHF                                                        | .904                                 | .855 | .764  | .000 | .928       | .700                                 | .900 | .877  | .000 | .903       | .956                   | .636 | .919  | .000 | .974       | .700                         | .475 | .450  | .000 | .617       | .927       |



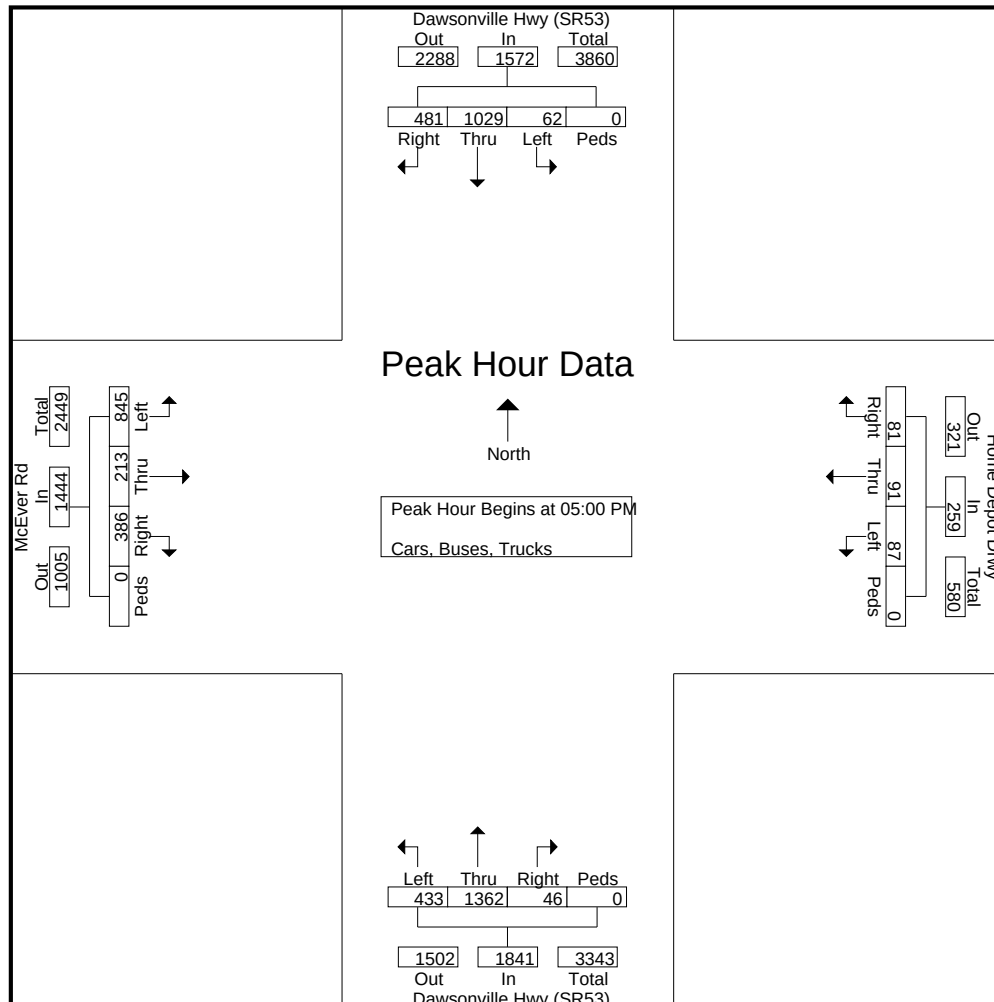
# Reliable Traffic Data Services, LLC

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TMC Data  
Dawsonville Hwy (SR53) @ McEver Rd  
Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520007  
Site Code : 39520007  
Start Date : 11/17/2016  
Page No : 3

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | McEver Rd<br>Eastbound |      |       |      |            | Home Depot Drwy<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                   | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                        |      |       |      |            |                              |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                                      |      |       |      |            |                                      |      |       |      |            |                        |      |       |      |            |                              |      |       |      |            |            |
| 05:00 PM                                                   | 108                                  | 352  | 17    | 0    | 477        | 15                                   | 257  | 115   | 0    | 387        | 178                    | 42   | 122   | 0    | 342        | 27                           | 19   | 17    | 0    | 63         | 1269       |
| 05:15 PM                                                   | 101                                  | 335  | 11    | 0    | 447        | 12                                   | 259  | 137   | 0    | 408        | 224                    | 63   | 74    | 0    | 361        | 10                           | 33   | 19    | 0    | 62         | 1278       |
| 05:30 PM                                                   | 114                                  | 327  | 10    | 0    | 451        | 17                                   | 216  | 110   | 0    | 343        | 227                    | 59   | 95    | 0    | 381        | 22                           | 21   | 16    | 0    | 59         | 1234       |
| 05:45 PM                                                   | 110                                  | 348  | 8     | 0    | 466        | 18                                   | 297  | 119   | 0    | 434        | 216                    | 49   | 95    | 0    | 360        | 28                           | 18   | 29    | 0    | 75         | 1335       |
| Total Volume                                               | 433                                  | 1362 | 46    | 0    | 1841       | 62                                   | 1029 | 481   | 0    | 1572       | 845                    | 213  | 386   | 0    | 1444       | 87                           | 91   | 81    | 0    | 259        | 5116       |
| % App. Total                                               | 23.5                                 | 74   | 2.5   | 0    |            | 3.9                                  | 65.5 | 30.6  | 0    |            | 58.5                   | 14.8 | 26.7  | 0    |            | 33.6                         | 35.1 | 31.3  | 0    |            |            |
| PHF                                                        | .950                                 | .967 | .676  | .000 | .965       | .861                                 | .866 | .878  | .000 | .906       | .931                   | .845 | .791  | .000 | .948       | .777                         | .689 | .698  | .000 | .863       | .958       |





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TMC Data  
Dawsonville Hwy (SR53) @ Green Hill Cir  
Gainesville, GA  
7-9am I 4.30-6.30pm

File Name : 39520008  
Site Code : 39520008  
Start Date : 11/17/2016  
Page No : 1

## Groups Printed- Cars, Buses, Trucks

|               | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Green Hill Circle<br>Eastbound |      |       |      |            | Commercial Drwy<br>Westbound |      |       |      |            |            |
|---------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|--------------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|------------|
| Start Time    | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                           | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 13                                   | 123  | 0     | 0    | 136        | 1                                    | 236  | 7     | 0    | 244        | 10                             | 0    | 22    | 0    | 32         | 1                            | 0    | 0     | 0    | 1          | 413        |
| 07:15 AM      | 33                                   | 134  | 2     | 0    | 169        | 3                                    | 372  | 12    | 0    | 387        | 14                             | 1    | 25    | 0    | 40         | 2                            | 0    | 1     | 0    | 3          | 599        |
| 07:30 AM      | 28                                   | 167  | 1     | 0    | 196        | 2                                    | 387  | 10    | 0    | 399        | 17                             | 0    | 34    | 0    | 51         | 2                            | 0    | 2     | 0    | 4          | 650        |
| 07:45 AM      | 39                                   | 174  | 1     | 0    | 214        | 2                                    | 379  | 14    | 0    | 395        | 21                             | 1    | 36    | 0    | 58         | 2                            | 1    | 0     | 0    | 3          | 670        |
| Total         | 113                                  | 598  | 4     | 0    | 715        | 8                                    | 1374 | 43    | 0    | 1425       | 62                             | 2    | 117   | 0    | 181        | 7                            | 1    | 3     | 0    | 11         | 2332       |
| 08:00 AM      | 33                                   | 189  | 5     | 0    | 227        | 4                                    | 320  | 11    | 0    | 335        | 16                             | 0    | 39    | 0    | 55         | 2                            | 0    | 2     | 0    | 4          | 621        |
| 08:15 AM      | 35                                   | 224  | 3     | 0    | 262        | 4                                    | 318  | 17    | 0    | 339        | 13                             | 0    | 32    | 0    | 45         | 0                            | 0    | 0     | 0    | 0          | 646        |
| 08:30 AM      | 34                                   | 197  | 7     | 0    | 238        | 3                                    | 322  | 15    | 0    | 340        | 10                             | 1    | 28    | 0    | 39         | 1                            | 4    | 0     | 0    | 5          | 622        |
| 08:45 AM      | 29                                   | 205  | 7     | 0    | 241        | 5                                    | 324  | 10    | 0    | 339        | 15                             | 2    | 30    | 0    | 47         | 3                            | 2    | 1     | 0    | 6          | 633        |
| Total         | 131                                  | 815  | 22    | 0    | 968        | 16                                   | 1284 | 53    | 0    | 1353       | 54                             | 3    | 129   | 0    | 186        | 6                            | 6    | 3     | 0    | 15         | 2522       |
| *** BREAK *** |                                      |      |       |      |            |                                      |      |       |      |            |                                |      |       |      |            |                              |      |       |      |            |            |
| 04:30 PM      | 51                                   | 374  | 12    | 0    | 437        | 11                                   | 352  | 11    | 0    | 374        | 23                             | 1    | 30    | 0    | 54         | 20                           | 0    | 9     | 0    | 29         | 894        |
| 04:45 PM      | 57                                   | 408  | 18    | 0    | 483        | 8                                    | 361  | 10    | 0    | 379        | 30                             | 0    | 28    | 0    | 58         | 17                           | 5    | 9     | 0    | 31         | 951        |
| Total         | 108                                  | 782  | 30    | 0    | 920        | 19                                   | 713  | 21    | 0    | 753        | 53                             | 1    | 58    | 0    | 112        | 37                           | 5    | 18    | 0    | 60         | 1845       |
| 05:00 PM      | 60                                   | 436  | 20    | 0    | 516        | 7                                    | 348  | 13    | 0    | 368        | 21                             | 1    | 45    | 0    | 67         | 16                           | 8    | 4     | 0    | 28         | 979        |
| 05:15 PM      | 62                                   | 453  | 19    | 0    | 534        | 12                                   | 362  | 17    | 0    | 391        | 39                             | 2    | 36    | 0    | 77         | 19                           | 5    | 14    | 0    | 38         | 1040       |
| 05:30 PM      | 57                                   | 442  | 12    | 0    | 511        | 12                                   | 337  | 11    | 0    | 360        | 36                             | 6    | 33    | 0    | 75         | 16                           | 5    | 9     | 0    | 30         | 976        |
| 05:45 PM      | 69                                   | 418  | 19    | 0    | 506        | 9                                    | 345  | 12    | 0    | 366        | 36                             | 0    | 24    | 0    | 60         | 9                            | 2    | 11    | 0    | 22         | 954        |
| Total         | 248                                  | 1749 | 70    | 0    | 2067       | 40                                   | 1392 | 53    | 0    | 1485       | 132                            | 9    | 138   | 0    | 279        | 60                           | 20   | 38    | 0    | 118        | 3949       |
| 06:00 PM      | 62                                   | 389  | 22    | 0    | 473        | 4                                    | 369  | 17    | 0    | 390        | 40                             | 1    | 25    | 0    | 66         | 9                            | 6    | 16    | 0    | 31         | 960        |
| 06:15 PM      | 78                                   | 374  | 7     | 0    | 459        | 11                                   | 361  | 22    | 0    | 394        | 29                             | 1    | 19    | 0    | 49         | 16                           | 6    | 17    | 0    | 39         | 941        |
| Grand Total   | 740                                  | 4707 | 155   | 0    | 5602       | 98                                   | 5493 | 209   | 0    | 5800       | 370                            | 17   | 486   | 0    | 873        | 135                          | 44   | 95    | 0    | 274        | 12549      |
| Apprch %      | 13.2                                 | 84   | 2.8   | 0    |            | 1.7                                  | 94.7 | 3.6   | 0    |            | 42.4                           | 1.9  | 55.7  | 0    |            | 49.3                         | 16.1 | 34.7  | 0    |            |            |
| Total %       | 5.9                                  | 37.5 | 1.2   | 0    | 44.6       | 0.8                                  | 43.8 | 1.7   | 0    | 46.2       | 2.9                            | 0.1  | 3.9   | 0    | 7          | 1.1                          | 0.4  | 0.8   | 0    | 2.2        |            |

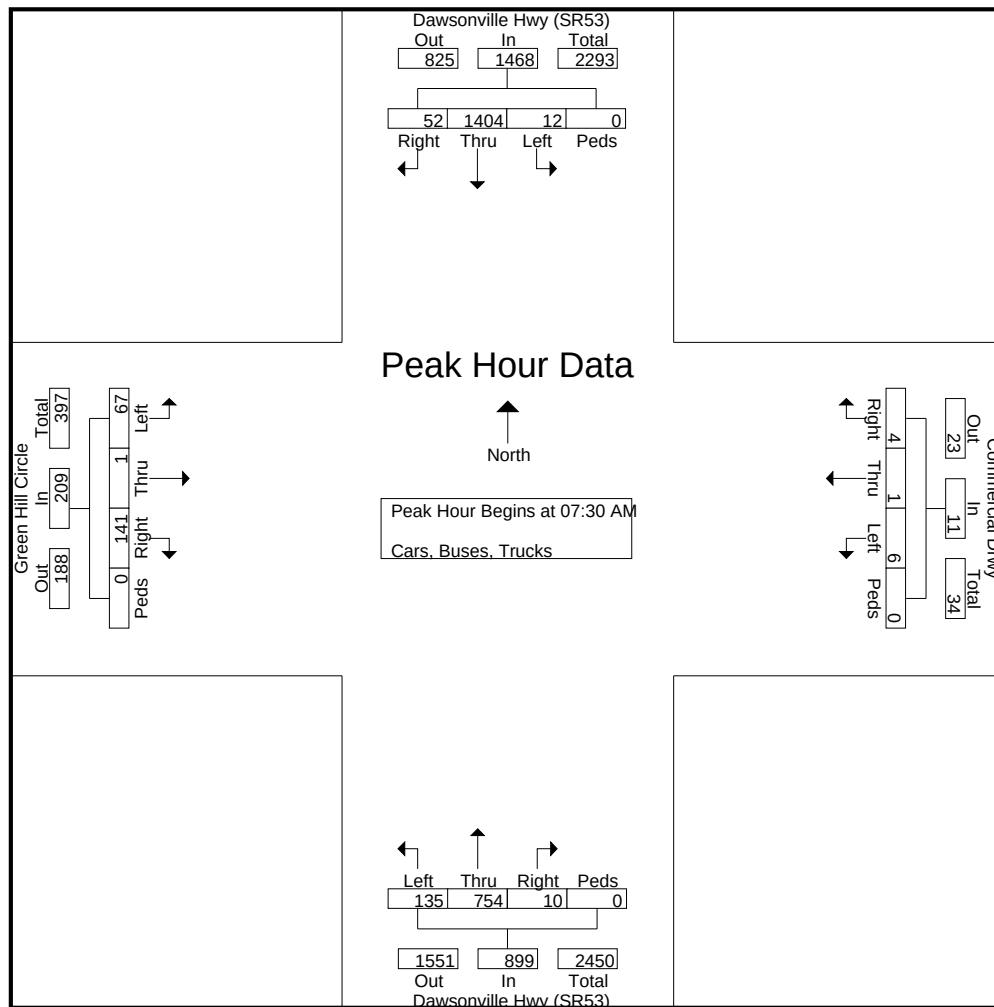
# Reliable Traffic Data Services, LLC

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TMC Data  
Dawsonville Hwy (SR53) @ Green Hill Cir  
Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520008  
Site Code : 39520008  
Start Date : 11/17/2016  
Page No : 2

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Green Hill Circle<br>Eastbound |      |       |      |            | Commercial Drwy<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|--------------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                           | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                                |      |       |      |            |                              |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                                      |      |       |      |            |                                      |      |       |      |            |                                |      |       |      |            |                              |      |       |      |            |            |
| 07:30 AM                                                   | 28                                   | 167  | 1     | 0    | 196        | 2                                    | 387  | 10    | 0    | 399        | 17                             | 0    | 34    | 0    | 51         | 2                            | 0    | 2     | 0    | 4          | 650        |
| 07:45 AM                                                   | 39                                   | 174  | 1     | 0    | 214        | 2                                    | 379  | 14    | 0    | 395        | 21                             | 1    | 36    | 0    | 58         | 2                            | 1    | 0     | 0    | 3          | 670        |
| 08:00 AM                                                   | 33                                   | 189  | 5     | 0    | 227        | 4                                    | 320  | 11    | 0    | 335        | 16                             | 0    | 39    | 0    | 55         | 2                            | 0    | 2     | 0    | 4          | 621        |
| 08:15 AM                                                   | 35                                   | 224  | 3     | 0    | 262        | 4                                    | 318  | 17    | 0    | 339        | 13                             | 0    | 32    | 0    | 45         | 0                            | 0    | 0     | 0    | 0          | 646        |
| Total Volume                                               | 135                                  | 754  | 10    | 0    | 899        | 12                                   | 1404 | 52    | 0    | 1468       | 67                             | 1    | 141   | 0    | 209        | 6                            | 1    | 4     | 0    | 11         | 2587       |
| % App. Total                                               | 15                                   | 83.9 | 1.1   | 0    |            | 0.8                                  | 95.6 | 3.5   | 0    |            | 32.1                           | 0.5  | 67.5  | 0    |            | 54.5                         | 9.1  | 36.4  | 0    |            |            |
| PHF                                                        | .865                                 | .842 | .500  | .000 | .858       | .750                                 | .907 | .765  | .000 | .920       | .798                           | .250 | .904  | .000 | .901       | .750                         | .250 | .500  | .000 | .688       | .965       |



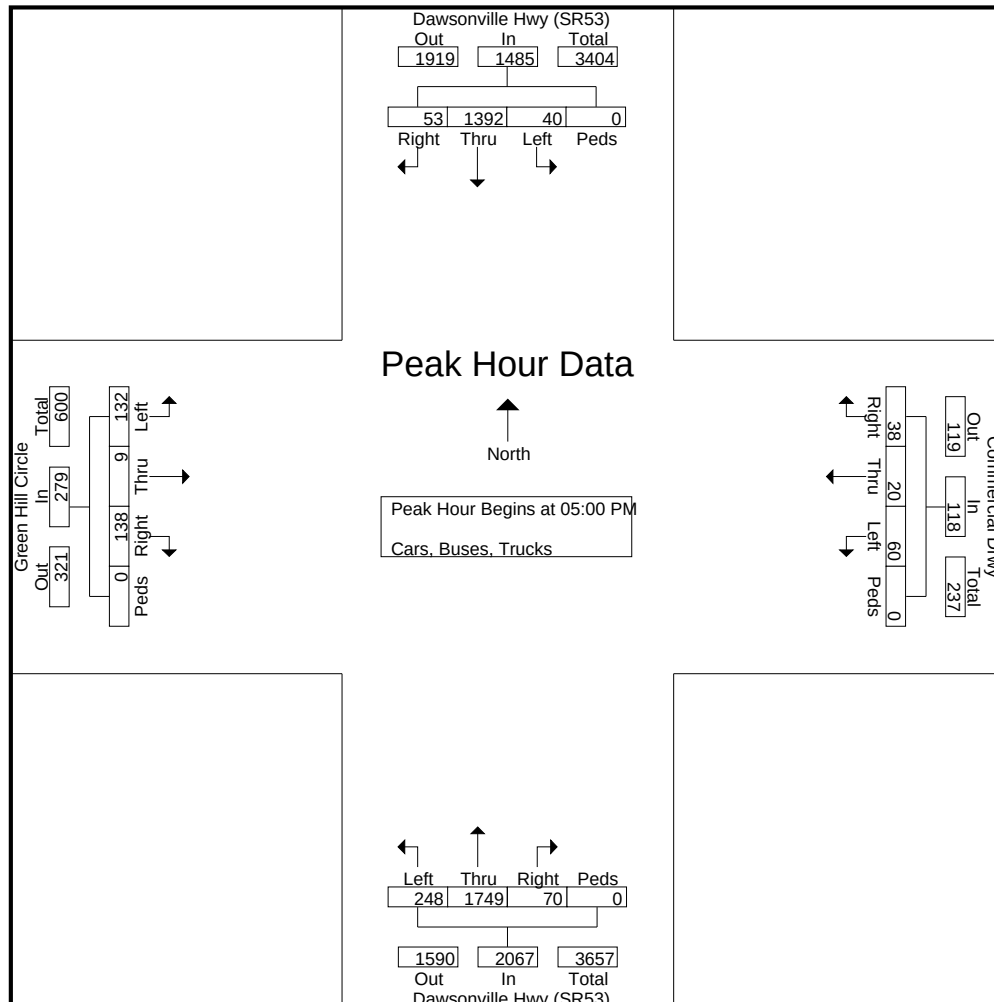
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TMC Data  
Dawsonville Hwy (SR53) @ Green Hill Cir  
Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520008  
Site Code : 39520008  
Start Date : 11/17/2016  
Page No : 3

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Green Hill Circle<br>Eastbound |      |       |      |            | Commercial Drwy<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|--------------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                           | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                                |      |       |      |            |                              |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                                      |      |       |      |            |                                      |      |       |      |            |                                |      |       |      |            |                              |      |       |      |            |            |
| 05:00 PM                                                   | 60                                   | 436  | 20    | 0    | 516        | 7                                    | 348  | 13    | 0    | 368        | 21                             | 1    | 45    | 0    | 67         | 16                           | 8    | 4     | 0    | 28         | 979        |
| 05:15 PM                                                   | 62                                   | 453  | 19    | 0    | 534        | 12                                   | 362  | 17    | 0    | 391        | 39                             | 2    | 36    | 0    | 77         | 19                           | 5    | 14    | 0    | 38         | 1040       |
| 05:30 PM                                                   | 57                                   | 442  | 12    | 0    | 511        | 12                                   | 337  | 11    | 0    | 360        | 36                             | 6    | 33    | 0    | 75         | 16                           | 5    | 9     | 0    | 30         | 976        |
| 05:45 PM                                                   | 69                                   | 418  | 19    | 0    | 506        | 9                                    | 345  | 12    | 0    | 366        | 36                             | 0    | 24    | 0    | 60         | 9                            | 2    | 11    | 0    | 22         | 954        |
| Total Volume                                               | 248                                  | 1749 | 70    | 0    | 2067       | 40                                   | 1392 | 53    | 0    | 1485       | 132                            | 9    | 138   | 0    | 279        | 60                           | 20   | 38    | 0    | 118        | 3949       |
| % App. Total                                               | 12                                   | 84.6 | 3.4   | 0    |            | 2.7                                  | 93.7 | 3.6   | 0    |            | 47.3                           | 3.2  | 49.5  | 0    |            | 50.8                         | 16.9 | 32.2  | 0    |            |            |
| PHF                                                        | .899                                 | .965 | .875  | .000 | .968       | .833                                 | .961 | .779  | .000 | .949       | .846                           | .375 | .767  | .000 | .906       | .789                         | .625 | .679  | .000 | .776       | .949       |



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TMC Data  
Dawsonville Hwy (SR53) @  
Shallowford Rd, Gainesville, GA  
7-9am I 4.30-6.30pm

File Name : 39520009  
Site Code : 39520009  
Start Date : 11/17/2016  
Page No : 1

## Groups Printed- Cars, Buses, Trucks

|               | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Shallowford Rd<br>Eastbound |      |       |      |            | Commercial Drwy<br>Westbound |      |       |      |            |            |
|---------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|-----------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|------------|
| Start Time    | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                        | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 1                                    | 123  | 1     | 0    | 125        | 3                                    | 226  | 58    | 0    | 287        | 15                          | 0    | 1     | 0    | 16         | 1                            | 0    | 0     | 0    | 1          | 429        |
| 07:15 AM      | 4                                    | 136  | 2     | 0    | 142        | 3                                    | 254  | 74    | 0    | 331        | 18                          | 0    | 2     | 0    | 20         | 0                            | 0    | 0     | 0    | 0          | 493        |
| 07:30 AM      | 3                                    | 146  | 1     | 0    | 150        | 0                                    | 334  | 82    | 0    | 416        | 28                          | 0    | 4     | 0    | 32         | 0                            | 1    | 2     | 0    | 3          | 601        |
| 07:45 AM      | 3                                    | 178  | 6     | 0    | 187        | 0                                    | 342  | 85    | 0    | 427        | 35                          | 0    | 2     | 0    | 37         | 0                            | 0    | 0     | 0    | 0          | 651        |
| Total         | 11                                   | 583  | 10    | 0    | 604        | 6                                    | 1156 | 299   | 0    | 1461       | 96                          | 0    | 9     | 0    | 105        | 1                            | 1    | 2     | 0    | 4          | 2174       |
| 08:00 AM      | 3                                    | 188  | 3     | 0    | 194        | 0                                    | 307  | 87    | 0    | 394        | 34                          | 1    | 0     | 0    | 35         | 0                            | 1    | 1     | 0    | 2          | 625        |
| 08:15 AM      | 1                                    | 226  | 3     | 0    | 230        | 1                                    | 266  | 84    | 0    | 351        | 41                          | 1    | 2     | 0    | 44         | 2                            | 2    | 0     | 0    | 4          | 629        |
| 08:30 AM      | 7                                    | 186  | 8     | 0    | 201        | 0                                    | 268  | 82    | 0    | 350        | 45                          | 0    | 3     | 0    | 48         | 0                            | 1    | 0     | 0    | 1          | 600        |
| 08:45 AM      | 3                                    | 190  | 7     | 0    | 200        | 0                                    | 282  | 72    | 0    | 354        | 44                          | 2    | 5     | 0    | 51         | 0                            | 1    | 1     | 0    | 2          | 607        |
| Total         | 14                                   | 790  | 21    | 0    | 825        | 1                                    | 1123 | 325   | 0    | 1449       | 164                         | 4    | 10    | 0    | 178        | 2                            | 5    | 2     | 0    | 9          | 2461       |
| *** BREAK *** |                                      |      |       |      |            |                                      |      |       |      |            |                             |      |       |      |            |                              |      |       |      |            |            |
| 04:30 PM      | 9                                    | 322  | 23    | 0    | 354        | 2                                    | 302  | 102   | 0    | 406        | 109                         | 5    | 6     | 0    | 120        | 7                            | 6    | 5     | 0    | 18         | 898        |
| 04:45 PM      | 9                                    | 379  | 24    | 0    | 412        | 1                                    | 297  | 107   | 0    | 405        | 107                         | 2    | 6     | 0    | 115        | 17                           | 3    | 1     | 0    | 21         | 953        |
| Total         | 18                                   | 701  | 47    | 0    | 766        | 3                                    | 599  | 209   | 0    | 811        | 216                         | 7    | 12    | 0    | 235        | 24                           | 9    | 6     | 0    | 39         | 1851       |
| 05:00 PM      | 12                                   | 393  | 15    | 0    | 420        | 2                                    | 304  | 113   | 0    | 419        | 142                         | 9    | 10    | 0    | 161        | 8                            | 6    | 2     | 0    | 16         | 1016       |
| 05:15 PM      | 5                                    | 441  | 32    | 0    | 478        | 1                                    | 318  | 128   | 0    | 447        | 102                         | 5    | 2     | 0    | 109        | 9                            | 8    | 1     | 0    | 18         | 1052       |
| 05:30 PM      | 12                                   | 388  | 30    | 0    | 430        | 3                                    | 267  | 113   | 0    | 383        | 136                         | 13   | 8     | 0    | 157        | 7                            | 5    | 4     | 0    | 16         | 986        |
| 05:45 PM      | 11                                   | 417  | 37    | 0    | 465        | 1                                    | 272  | 109   | 0    | 382        | 138                         | 11   | 6     | 0    | 155        | 12                           | 8    | 0     | 0    | 20         | 1022       |
| Total         | 40                                   | 1639 | 114   | 0    | 1793       | 7                                    | 1161 | 463   | 0    | 1631       | 518                         | 38   | 26    | 0    | 582        | 36                           | 27   | 7     | 0    | 70         | 4076       |
| 06:00 PM      | 12                                   | 356  | 17    | 0    | 385        | 4                                    | 284  | 150   | 0    | 438        | 108                         | 2    | 11    | 0    | 121        | 16                           | 5    | 1     | 0    | 22         | 966        |
| 06:15 PM      | 10                                   | 334  | 18    | 0    | 362        | 5                                    | 269  | 120   | 0    | 394        | 126                         | 4    | 0     | 0    | 130        | 17                           | 6    | 1     | 0    | 24         | 910        |
| Grand Total   | 105                                  | 4403 | 227   | 0    | 4735       | 26                                   | 4592 | 1566  | 0    | 6184       | 1228                        | 55   | 68    | 0    | 1351       | 96                           | 53   | 19    | 0    | 168        | 12438      |
| Apprch %      | 2.2                                  | 93   | 4.8   | 0    |            | 0.4                                  | 74.3 | 25.3  | 0    |            | 90.9                        | 4.1  | 5     | 0    |            | 57.1                         | 31.5 | 11.3  | 0    |            |            |
| Total %       | 0.8                                  | 35.4 | 1.8   | 0    | 38.1       | 0.2                                  | 36.9 | 12.6  | 0    | 49.7       | 9.9                         | 0.4  | 0.5   | 0    | 10.9       | 0.8                          | 0.4  | 0.2   | 0    | 1.4        |            |

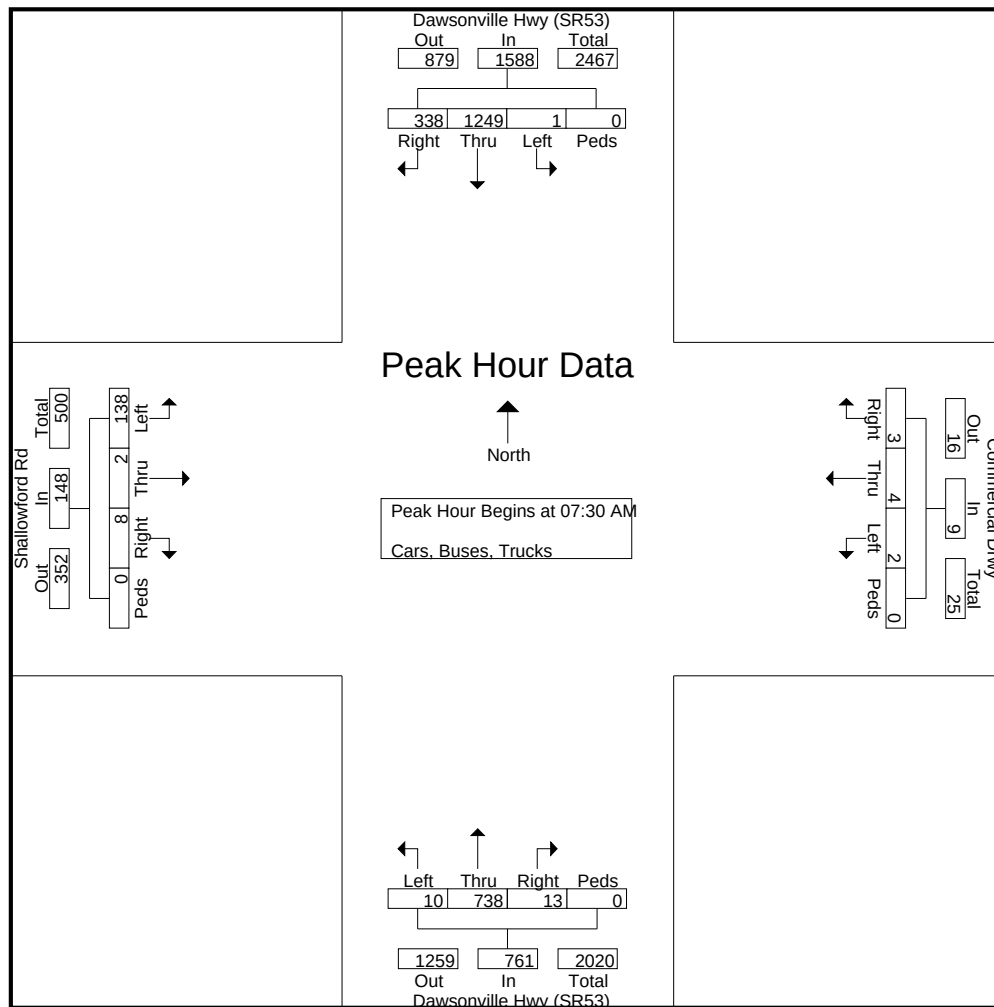
# Reliable Traffic Data Services, LLC

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TMC Data  
Dawsonville Hwy (SR53) @  
Shallowford Rd, Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520009  
Site Code : 39520009  
Start Date : 11/17/2016  
Page No : 2

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Shallowford Rd<br>Eastbound |      |       |      |            | Commercial Drwy<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|-----------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                        | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                             |      |       |      |            |                              |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                                      |      |       |      |            |                                      |      |       |      |            |                             |      |       |      |            |                              |      |       |      |            |            |
| 07:30 AM                                                   | 3                                    | 146  | 1     | 0    | 150        | 0                                    | 334  | 82    | 0    | 416        | 28                          | 0    | 4     | 0    | 32         | 0                            | 1    | 2     | 0    | 3          | 601        |
| 07:45 AM                                                   | 3                                    | 178  | 6     | 0    | 187        | 0                                    | 342  | 85    | 0    | 427        | 35                          | 0    | 2     | 0    | 37         | 0                            | 0    | 0     | 0    | 0          | 651        |
| 08:00 AM                                                   | 3                                    | 188  | 3     | 0    | 194        | 0                                    | 307  | 87    | 0    | 394        | 34                          | 1    | 0     | 0    | 35         | 0                            | 1    | 1     | 0    | 2          | 625        |
| 08:15 AM                                                   | 1                                    | 226  | 3     | 0    | 230        | 1                                    | 266  | 84    | 0    | 351        | 41                          | 1    | 2     | 0    | 44         | 2                            | 2    | 0     | 0    | 4          | 629        |
| Total Volume                                               | 10                                   | 738  | 13    | 0    | 761        | 1                                    | 1249 | 338   | 0    | 1588       | 138                         | 2    | 8     | 0    | 148        | 2                            | 4    | 3     | 0    | 9          | 2506       |
| % App. Total                                               | 1.3                                  | 97   | 1.7   | 0    |            | 0.1                                  | 78.7 | 21.3  | 0    |            | 93.2                        | 1.4  | 5.4   | 0    |            | 22.2                         | 44.4 | 33.3  | 0    |            |            |
| PHF                                                        | .833                                 | .816 | .542  | .000 | .827       | .250                                 | .913 | .971  | .000 | .930       | .841                        | .500 | .500  | .000 | .841       | .250                         | .500 | .375  | .000 | .563       | .962       |



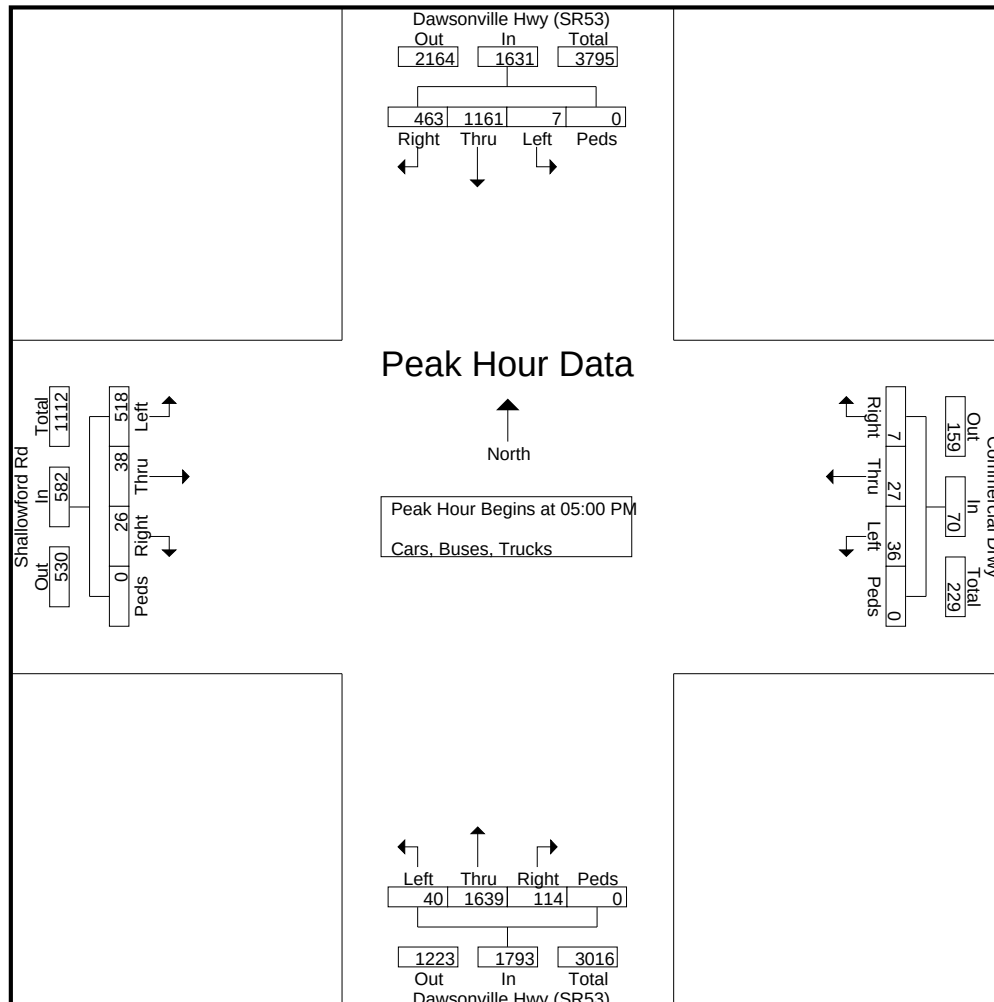
# Reliable Traffic Data Services, LLC

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TMC Data  
Dawsonville Hwy (SR53) @  
Shallowford Rd, Gainesville, GA  
7-9am I 4.30-6.30pm

File Name : 39520009  
Site Code : 39520009  
Start Date : 11/17/2016  
Page No : 3

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Shallowford Rd<br>Eastbound |      |       |      |            | Commercial Drwy<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|-----------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                        | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                             |      |       |      |            |                              |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                                      |      |       |      |            |                                      |      |       |      |            |                             |      |       |      |            |                              |      |       |      |            |            |
| 05:00 PM                                                   | 12                                   | 393  | 15    | 0    | 420        | 2                                    | 304  | 113   | 0    | 419        | 142                         | 9    | 10    | 0    | 161        | 8                            | 6    | 2     | 0    | 16         | 1016       |
| 05:15 PM                                                   | 5                                    | 441  | 32    | 0    | 478        | 1                                    | 318  | 128   | 0    | 447        | 102                         | 5    | 2     | 0    | 109        | 9                            | 8    | 1     | 0    | 18         | 1052       |
| 05:30 PM                                                   | 12                                   | 388  | 30    | 0    | 430        | 3                                    | 267  | 113   | 0    | 383        | 136                         | 13   | 8     | 0    | 157        | 7                            | 5    | 4     | 0    | 16         | 986        |
| 05:45 PM                                                   | 11                                   | 417  | 37    | 0    | 465        | 1                                    | 272  | 109   | 0    | 382        | 138                         | 11   | 6     | 0    | 155        | 12                           | 8    | 0     | 0    | 20         | 1022       |
| Total Volume                                               | 40                                   | 1639 | 114   | 0    | 1793       | 7                                    | 1161 | 463   | 0    | 1631       | 518                         | 38   | 26    | 0    | 582        | 36                           | 27   | 7     | 0    | 70         | 4076       |
| % App. Total                                               | 2.2                                  | 91.4 | 6.4   | 0    |            | 0.4                                  | 71.2 | 28.4  | 0    |            | 89                          | 6.5  | 4.5   | 0    |            | 51.4                         | 38.6 | 10    | 0    |            |            |
| PHF                                                        | .833                                 | .929 | .770  | .000 | .938       | .583                                 | .913 | .904  | .000 | .912       | .912                        | .731 | .650  | .000 | .904       | .750                         | .844 | .438  | .000 | .875       | .969       |



## Appendix B

### Intersection Analysis Methodology



# Intersection Analysis Methodology

The methodology used for evaluating traffic operations at intersections is presented in the Transportation Research Board’s *Highway Capacity Manual*, 2010 edition (HCM 2010). Synchro 8 software, which emulates the HCM 2010 methodology, was used for all analyses. The following is an overview of the methodology employed for the analysis of signalized intersections and stop-sign controlled (unsignalized) intersections.

## Signalized Intersections

The criteria for evaluating signalized intersections are capacity and level of service. The capacity analysis of an intersection compares the volume of traffic using the various lane groups at the intersection to the capacity of those lane groups. This produces a volume-to-capacity (v/c) ratio for each lane group. A v/c ratio greater than 1.0 indicates that the volume of traffic has exceeded the capacity available and indicates a temporary excess of demand. The HCM 2010 methodology computes a critical v/c ratio for an intersection based on the critical lane groups or approaches. This critical v/c ratio is an indication of overall intersection sufficiency.

Level of service for a signalized intersection is defined in terms of control delay per vehicle. For signalized intersections, a composite intersection level of service is determined. The thresholds for each level of service are higher for signalized intersections than for unsignalized intersections. This is attributable to a variety of factors including expectation and acceptance of higher delays at signals, and the fact that drivers can relax when waiting at a signal as opposed to having to remain attentive as they proceed through the unsignalized intersection. The level of service criteria for signalized intersections are shown in Table A.

**Table A – Level of Service Criteria for Signalized Intersections**

| Control Delay (s/veh) | Level of Service by Volume-to-Capacity Ratio |      |
|-----------------------|----------------------------------------------|------|
|                       | ≤1.0                                         | >1.0 |
| ≤ 10                  | A                                            | F    |
| > 10 and ≤ 20         | B                                            | F    |
| > 20 and ≤ 35         | C                                            | F    |
| > 35 and ≤ 55         | D                                            | F    |
| > 55 and ≤ 80         | E                                            | F    |
| > 80                  | F                                            | F    |

Source: *Highway Capacity Manual 2010*

## Unsignalized Intersections

The operations at an unsignalized intersection are defined in terms of levels of service. Level of service (LOS) is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. Level of service for an unsignalized intersection is defined in terms of control delay per vehicle. Control delay is that portion of delay attributable to the control device and includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The delays at unsignalized intersections are based on gap acceptance theory,

factoring in availability of gaps, usefulness of the gaps, and the priority of right-of-way given to each traffic stream.

Levels of service are assigned letters A through F. LOS A indicates operations with very low control delay while LOS F describes operations with high control delay. LOS F is considered to be unacceptable by most drivers, while LOS E is typically considered to be the limit of acceptable delay. The level of service criteria for unsignalized intersections are presented in Table B.

**Table B – Level of Service Criteria for Unsignalized Intersections**

| Control Delay (s/veh) | Level of Service by Volume-to-Capacity Ratio |      |
|-----------------------|----------------------------------------------|------|
|                       | ≤1.0                                         | >1.0 |
| 0 – 10                | A                                            | F    |
| > 10 and ≤ 15         | B                                            | F    |
| > 15 and ≤ 25         | C                                            | F    |
| > 25 and ≤ 35         | D                                            | F    |
| > 35 and ≤ 50         | E                                            | F    |
| > 50                  | F                                            | F    |

*Source: Highway Capacity Manual 2010*

## Appendix C

### Existing Intersection Analysis

Lanier Tract DRI  
1: Sportsman Club Road & Strickland Drive

existing a.m.

| Intersection             |        |          |      |        |       |      |
|--------------------------|--------|----------|------|--------|-------|------|
| Int Delay, s/veh         | 2.6    |          |      |        |       |      |
| Movement                 | WBL    | WBR      | NBT  | NBR    | SBL   | SBT  |
| Vol, veh/h               | 10     | 0        | 6    | 1      | 0     | 23   |
| Conflicting Peds, #/hr   | 0      | 0        | 0    | 0      | 0     | 0    |
| Sign Control             | Stop   | Stop     | Free | Free   | Free  | Free |
| RT Channelized           | -      | None     | -    | None   | -     | None |
| Storage Length           | 0      | -        | -    | -      | -     | -    |
| Veh in Median Storage, # | 0      | -        | 0    | -      | -     | 0    |
| Grade, %                 | 0      | -        | 0    | -      | -     | 0    |
| Peak Hour Factor         | 50     | 50       | 58   | 58     | 64    | 64   |
| Heavy Vehicles, %        | 2      | 2        | 2    | 2      | 2     | 2    |
| Mvmt Flow                | 20     | 0        | 10   | 2      | 0     | 36   |
| Major/Minor              | Minor1 | Major1   |      | Major2 |       |      |
| Conflicting Flow All     | 47     | 11       | 0    | 0      | 12    | 0    |
| Stage 1                  | 11     | -        | -    | -      | -     | -    |
| Stage 2                  | 36     | -        | -    | -      | -     | -    |
| Critical Hdwy            | 6.42   | 6.22     | -    | -      | 4.12  | -    |
| Critical Hdwy Stg 1      | 5.42   | -        | -    | -      | -     | -    |
| Critical Hdwy Stg 2      | 5.42   | -        | -    | -      | -     | -    |
| Follow-up Hdwy           | 3.518  | 3.318    | -    | -      | 2.218 | -    |
| Pot Cap-1 Maneuver       | 963    | 1070     | -    | -      | 1607  | -    |
| Stage 1                  | 1012   | -        | -    | -      | -     | -    |
| Stage 2                  | 986    | -        | -    | -      | -     | -    |
| Platoon blocked, %       |        |          | -    | -      |       | -    |
| Mov Cap-1 Maneuver       | 963    | 1070     | -    | -      | 1607  | -    |
| Mov Cap-2 Maneuver       | 963    | -        | -    | -      | -     | -    |
| Stage 1                  | 1012   | -        | -    | -      | -     | -    |
| Stage 2                  | 986    | -        | -    | -      | -     | -    |
| Approach                 | WB     | NB       |      | SB     |       |      |
| HCM Control Delay, s     | 8.8    | 0        |      | 0      |       |      |
| HCM LOS                  | A      |          |      |        |       |      |
| Minor Lane/Major Mvmt    | NBT    | NBRWBLn1 | SBL  | SBT    |       |      |
| Capacity (veh/h)         | -      | - 963    | 1607 | -      |       |      |
| HCM Lane V/C Ratio       | -      | - 0.021  | -    | -      |       |      |
| HCM Control Delay (s)    | -      | - 8.8    | 0    | -      |       |      |
| HCM Lane LOS             | -      | - A      | A    | -      |       |      |
| HCM 95th %tile Q(veh)    | -      | - 0.1    | 0    | -      |       |      |

Lanier Tract DRI  
2: GA 53 & Sportsman Club Road

existing a.m.

| Intersection             |        |       |      |        |      |      |        |       |      |        |      |      |
|--------------------------|--------|-------|------|--------|------|------|--------|-------|------|--------|------|------|
| Int Delay, s/veh         |        | 5.3   |      |        |      |      |        |       |      |        |      |      |
|                          |        |       |      |        |      |      |        |       |      |        |      |      |
| Movement                 | EBL    | EBT   | EBR  | WBL    | WBT  | WBR  | NBL    | NBT   | NBR  | SBL    | SBT  | SBR  |
| Vol, veh/h               | 9      | 1687  | 0    | 0      | 743  | 8    | 0      | 0     | 0    | 25     | 0    | 15   |
| Conflicting Peds, #/hr   | 0      | 0     | 0    | 0      | 0    | 0    | 0      | 0     | 0    | 0      | 0    | 0    |
| Sign Control             | Free   | Free  | Free | Free   | Free | Free | Stop   | Stop  | Stop | Stop   | Stop | Stop |
| RT Channelized           | -      | -     | None | -      | -    | None | -      | -     | None | -      | -    | None |
| Storage Length           | 0      | -     | -    | 0      | -    | -    | -      | -     | -    | -      | -    | -    |
| Veh in Median Storage, # | -      | 0     | -    | -      | 0    | -    | -      | 0     | -    | -      | 0    | -    |
| Grade, %                 | -      | 0     | -    | -      | 0    | -    | -      | 0     | -    | -      | 0    | -    |
| Peak Hour Factor         | 86     | 86    | 86   | 84     | 84   | 84   | 92     | 92    | 92   | 59     | 59   | 59   |
| Heavy Vehicles, %        | 2      | 2     | 2    | 2      | 2    | 2    | 2      | 2     | 2    | 2      | 2    | 2    |
| Mvmt Flow                | 10     | 1962  | 0    | 0      | 885  | 10   | 0      | 0     | 0    | 42     | 0    | 25   |
|                          |        |       |      |        |      |      |        |       |      |        |      |      |
| Major/Minor              | Major1 |       |      | Major2 |      |      | Minor1 |       |      | Minor2 |      |      |
| Conflicting Flow All     | 894    | 0     | 0    | 1962   | 0    | 0    | 2425   | 2877  | 981  | 1891   | 2872 | 447  |
| Stage 1                  | -      | -     | -    | -      | -    | -    | 1983   | 1983  | -    | 889    | 889  | -    |
| Stage 2                  | -      | -     | -    | -      | -    | -    | 442    | 894   | -    | 1002   | 1983 | -    |
| Critical Hdwy            | 4.14   | -     | -    | 4.14   | -    | -    | 7.54   | 6.54  | 6.94 | 7.54   | 6.54 | 6.94 |
| Critical Hdwy Stg 1      | -      | -     | -    | -      | -    | -    | 6.54   | 5.54  | -    | 6.54   | 5.54 | -    |
| Critical Hdwy Stg 2      | -      | -     | -    | -      | -    | -    | 6.54   | 5.54  | -    | 6.54   | 5.54 | -    |
| Follow-up Hdwy           | 2.22   | -     | -    | 2.22   | -    | -    | 3.52   | 4.02  | 3.32 | 3.52   | 4.02 | 3.32 |
| Pot Cap-1 Maneuver       | 755    | -     | -    | 293    | -    | -    | 17     | 16    | 249  | 43     | 16   | 559  |
| Stage 1                  | -      | -     | -    | -      | -    | -    | 63     | 105   | -    | 304    | 360  | -    |
| Stage 2                  | -      | -     | -    | -      | -    | -    | 564    | 358   | -    | 260    | 105  | -    |
| Platoon blocked, %       |        | -     | -    |        | -    | -    |        |       |      |        |      |      |
| Mov Cap-1 Maneuver       | 755    | -     | -    | 293    | -    | -    | 16     | 16    | 249  | 43     | 16   | 559  |
| Mov Cap-2 Maneuver       | -      | -     | -    | -      | -    | -    | 16     | 16    | -    | 43     | 16   | -    |
| Stage 1                  | -      | -     | -    | -      | -    | -    | 62     | 104   | -    | 300    | 360  | -    |
| Stage 2                  | -      | -     | -    | -      | -    | -    | 538    | 358   | -    | 257    | 104  | -    |
|                          |        |       |      |        |      |      |        |       |      |        |      |      |
| Approach                 | EB     |       |      | WB     |      |      | NB     |       |      | SB     |      |      |
| HCM Control Delay, s     | 0.1    |       |      | 0      |      |      | 0      |       |      | 224.6  |      |      |
| HCM LOS                  |        |       |      |        |      |      | A      |       |      | F      |      |      |
|                          |        |       |      |        |      |      |        |       |      |        |      |      |
| Minor Lane/Major Mvmt    | NBLn1  | EBL   | EBT  | EBR    | WBL  | WBT  | WBR    | SBLn1 |      |        |      |      |
| Capacity (veh/h)         | -      | 755   | -    | -      | 293  | -    | -      | 66    |      |        |      |      |
| HCM Lane V/C Ratio       | -      | 0.014 | -    | -      | -    | -    | -      | 1.027 |      |        |      |      |
| HCM Control Delay (s)    | 0      | 9.8   | -    | -      | 0    | -    | -      | 224.6 |      |        |      |      |
| HCM Lane LOS             | A      | A     | -    | -      | A    | -    | -      | F     |      |        |      |      |
| HCM 95th %tile Q(veh)    | -      | 0     | -    | -      | 0    | -    | -      | 5.2   |      |        |      |      |

Lanier Tract DRI  
3: GA 53 & Avonlea Way

existing a.m.

| Intersection             |        |        |       |        |      |      |
|--------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh         | 2.5    |        |       |        |      |      |
| Movement                 | EBL    | EBR    | NBL   | NBT    | SBT  | SBR  |
| Vol, veh/h               | 15     | 72     | 12    | 758    | 1668 | 6    |
| Conflicting Peds, #/hr   | 0      | 0      | 0     | 0      | 0    | 0    |
| Sign Control             | Stop   | Stop   | Free  | Free   | Free | Free |
| RT Channelized           | -      | None   | -     | None   | -    | None |
| Storage Length           | 0      | 0      | 0     | -      | -    | 0    |
| Veh in Median Storage, # | 0      | -      | -     | 0      | 0    | -    |
| Grade, %                 | 0      | -      | -     | 0      | 0    | -    |
| Peak Hour Factor         | 84     | 84     | 88    | 88     | 86   | 86   |
| Heavy Vehicles, %        | 2      | 2      | 2     | 2      | 2    | 2    |
| Mvmt Flow                | 18     | 86     | 14    | 861    | 1940 | 7    |
| Major/Minor              | Minor2 | Major1 |       | Major2 |      |      |
| Conflicting Flow All     | 2398   | 970    | 1940  | 0      | -    | 0    |
| Stage 1                  | 1940   | -      | -     | -      | -    | -    |
| Stage 2                  | 458    | -      | -     | -      | -    | -    |
| Critical Hdwy            | 6.84   | 6.94   | 4.14  | -      | -    | -    |
| Critical Hdwy Stg 1      | 5.84   | -      | -     | -      | -    | -    |
| Critical Hdwy Stg 2      | 5.84   | -      | -     | -      | -    | -    |
| Follow-up Hdwy           | 3.52   | 3.32   | 2.22  | -      | -    | -    |
| Pot Cap-1 Maneuver       | 28     | 253    | 299   | -      | -    | -    |
| Stage 1                  | 98     | -      | -     | -      | -    | -    |
| Stage 2                  | 604    | -      | -     | -      | -    | -    |
| Platoon blocked, %       |        |        |       | -      | -    | -    |
| Mov Cap-1 Maneuver       | 27     | 253    | 299   | -      | -    | -    |
| Mov Cap-2 Maneuver       | 27     | -      | -     | -      | -    | -    |
| Stage 1                  | 98     | -      | -     | -      | -    | -    |
| Stage 2                  | 576    | -      | -     | -      | -    | -    |
| Approach                 | EB     | NB     |       | SB     |      |      |
| HCM Control Delay, s     | 69.3   | 0.3    |       | 0      |      |      |
| HCM LOS                  | F      |        |       |        |      |      |
| Minor Lane/Major Mvmt    | NBL    | NBT    | EBLn1 | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)         | 299    | -      | 27    | 253    | -    | -    |
| HCM Lane V/C Ratio       | 0.046  | -      | 0.661 | 0.339  | -    | -    |
| HCM Control Delay (s)    | 17.6   | -      | 275.4 | 26.4   | -    | -    |
| HCM Lane LOS             | C      | -      | F     | D      | -    | -    |
| HCM 95th %tile Q(veh)    | 0.1    | -      | 2.1   | 1.4    | -    | -    |

Lanier Tract DRI  
4: GA 53 & Canterbury Road

existing a.m.

| Intersection             |        |        |       |        |      |      |
|--------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh         | 3.8    |        |       |        |      |      |
| Movement                 | EBL    | EBR    | NBL   | NBT    | SBT  | SBR  |
| Vol, veh/h               | 18     | 95     | 23    | 722    | 1782 | 7    |
| Conflicting Peds, #/hr   | 0      | 0      | 0     | 0      | 0    | 0    |
| Sign Control             | Stop   | Stop   | Free  | Free   | Free | Free |
| RT Channelized           | -      | None   | -     | None   | -    | None |
| Storage Length           | 0      | 0      | 0     | -      | -    | 0    |
| Veh in Median Storage, # | 0      | -      | -     | 0      | 0    | -    |
| Grade, %                 | 0      | -      | -     | 0      | 0    | -    |
| Peak Hour Factor         | 88     | 88     | 86    | 86     | 91   | 91   |
| Heavy Vehicles, %        | 2      | 2      | 2     | 2      | 2    | 2    |
| Mvmt Flow                | 20     | 108    | 27    | 840    | 1958 | 8    |
| Major/Minor              | Minor2 | Major1 |       | Major2 |      |      |
| Conflicting Flow All     | 2431   | 979    | 1958  | 0      | -    | 0    |
| Stage 1                  | 1958   | -      | -     | -      | -    | -    |
| Stage 2                  | 473    | -      | -     | -      | -    | -    |
| Critical Hdwy            | 6.84   | 6.94   | 4.14  | -      | -    | -    |
| Critical Hdwy Stg 1      | 5.84   | -      | -     | -      | -    | -    |
| Critical Hdwy Stg 2      | 5.84   | -      | -     | -      | -    | -    |
| Follow-up Hdwy           | 3.52   | 3.32   | 2.22  | -      | -    | -    |
| Pot Cap-1 Maneuver       | 26     | 249    | 294   | -      | -    | -    |
| Stage 1                  | 96     | -      | -     | -      | -    | -    |
| Stage 2                  | 593    | -      | -     | -      | -    | -    |
| Platoon blocked, %       |        |        |       | -      | -    | -    |
| Mov Cap-1 Maneuver       | 24     | 249    | 294   | -      | -    | -    |
| Mov Cap-2 Maneuver       | 24     | -      | -     | -      | -    | -    |
| Stage 1                  | 96     | -      | -     | -      | -    | -    |
| Stage 2                  | 539    | -      | -     | -      | -    | -    |
| Approach                 | EB     | NB     |       | SB     |      |      |
| HCM Control Delay, s     | 83.3   | 0.6    |       | 0      |      |      |
| HCM LOS                  | F      |        |       |        |      |      |
| Minor Lane/Major Mvmt    | NBL    | NBT    | EBLn1 | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)         | 294    | -      | 24    | 249    | -    | -    |
| HCM Lane V/C Ratio       | 0.091  | -      | 0.852 | 0.434  | -    | -    |
| HCM Control Delay (s)    | 18.5   | -      | 363.9 | 30.1   | -    | -    |
| HCM Lane LOS             | C      | -      | F     | D      | -    | -    |
| HCM 95th %tile Q(veh)    | 0.3    | -      | 2.6   | 2.1    | -    | -    |



Intersection

Int Delay, s/veh 1.4

| Movement                 | EBL  | EBR   | NBL  | NBT   | SBT  | SBR  |
|--------------------------|------|-------|------|-------|------|------|
| Vol, veh/h               | 5    | 41    | 27   | 787   | 2006 | 2    |
| Conflicting Peds, #/hr   | 0    | 0     | 0    | 0     | 0    | 0    |
| Sign Control             | Stop | Stop  | Free | Free  | Free | Free |
| RT Channelized           | -    | Yield | -    | Yield | -    | None |
| Storage Length           | 0    | 0     | 200  | -     | -    | 360  |
| Veh in Median Storage, # | 0    | -     | -    | 0     | 0    | -    |
| Grade, %                 | 0    | -     | -    | 1     | 0    | -    |
| Peak Hour Factor         | 82   | 82    | 87   | 87    | 89   | 89   |
| Heavy Vehicles, %        | 0    | 0     | 0    | 1     | 0    | 0    |
| Mvmt Flow                | 6    | 50    | 31   | 905   | 2254 | 2    |

| Major/Minor          | Minor2 |      | Major1 |   | Major2 |   |
|----------------------|--------|------|--------|---|--------|---|
| Conflicting Flow All | 2768   | 1127 | 2254   | 0 | -      | 0 |
| Stage 1              | 2254   | -    | -      | - | -      | - |
| Stage 2              | 514    | -    | -      | - | -      | - |
| Critical Hdwy        | 6.8    | 6.9  | 4.1    | - | -      | - |
| Critical Hdwy Stg 1  | 5.8    | -    | -      | - | -      | - |
| Critical Hdwy Stg 2  | 5.8    | -    | -      | - | -      | - |
| Follow-up Hdwy       | 3.5    | 3.3  | 2.2    | - | -      | - |
| Pot Cap-1 Maneuver   | 16     | 202  | 231    | - | -      | - |
| Stage 1              | 67     | -    | -      | - | -      | - |
| Stage 2              | 571    | -    | -      | - | -      | - |
| Platoon blocked, %   |        |      |        | - | -      | - |
| Mov Cap-1 Maneuver   | 14     | 202  | 231    | - | -      | - |
| Mov Cap-2 Maneuver   | 14     | -    | -      | - | -      | - |
| Stage 1              | 67     | -    | -      | - | -      | - |
| Stage 2              | 494    | -    | -      | - | -      | - |

| Approach             | EB   | NB  | SB |
|----------------------|------|-----|----|
| HCM Control Delay, s | 68.2 | 0.8 | 0  |
| HCM LOS              | F    |     |    |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | EBLn2 | SBT | SBR |
|-----------------------|-------|-----|-------|-------|-----|-----|
| Capacity (veh/h)      | 231   | -   | 14    | 202   | -   | -   |
| HCM Lane V/C Ratio    | 0.134 | -   | 0.436 | 0.248 | -   | -   |
| HCM Control Delay (s) | 23    | -   | 393.1 | 28.6  | -   | -   |
| HCM Lane LOS          | C     | -   | F     | D     | -   | -   |
| HCM 95th %tile Q(veh) | 0.5   | -   | 1.1   | 0.9   | -   | -   |

## Lanier Tract DRI

## 5: GA 53 &amp; Lanier Valley Dr/Ahaluna Dr

existing a.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Volume (vph)               | 19                                                                                | 5                                                                                 | 115                                                                               | 37                                                                                | 3                                                                                 | 20                                                                                | 55                                                                                  | 701                                                                                 | 11                                                                                  | 14                                                                                  | 1901                                                                                | 0                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 2%                                                                                |                                                                                   |                                                                                   | -4%                                                                               |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 100                                                                                 |                                                                                     | 0                                                                                   | 140                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.888                                                                             |                                                                                   |                                                                                   | 0.956                                                                             |                                                                                   |                                                                                     | 0.998                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   | 0.993                                                                             |                                                                                   |                                                                                   | 0.970                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1659                                                                              | 0                                                                                 | 0                                                                                 | 1797                                                                              | 0                                                                                 | 1796                                                                                | 3516                                                                                | 0                                                                                   | 1814                                                                                | 3628                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.941                                                                             |                                                                                   |                                                                                   | 0.405                                                                             |                                                                                   | 0.037                                                                               |                                                                                     |                                                                                     | 0.337                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1572                                                                              | 0                                                                                 | 0                                                                                 | 750                                                                               | 0                                                                                 | 70                                                                                  | 3516                                                                                | 0                                                                                   | 644                                                                                 | 3628                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 86                                                                                |                                                                                   |                                                                                   | 13                                                                                |                                                                                   |                                                                                     | 4                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 340                                                                               |                                                                                   |                                                                                   | 322                                                                               |                                                                                   |                                                                                     | 888                                                                                 |                                                                                     |                                                                                     | 1417                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.7                                                                               |                                                                                   |                                                                                   | 7.3                                                                               |                                                                                   |                                                                                     | 13.5                                                                                |                                                                                     |                                                                                     | 21.5                                                                                |                                                                                     |
| Peak Hour Factor           | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.83                                                                              | 0.83                                                                              | 0.83                                                                              | 0.85                                                                                | 0.85                                                                                | 0.85                                                                                | 0.87                                                                                | 0.87                                                                                | 0.87                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 21                                                                                | 5                                                                                 | 126                                                                               | 45                                                                                | 4                                                                                 | 24                                                                                | 65                                                                                  | 825                                                                                 | 13                                                                                  | 16                                                                                  | 2185                                                                                | 0                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 152                                                                               | 0                                                                                 | 0                                                                                 | 73                                                                                | 0                                                                                 | 65                                                                                  | 838                                                                                 | 0                                                                                   | 16                                                                                  | 2185                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 |                                                                                     | 0                                                                                   | 336                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   |                                                                                     | 0                                                                                   | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 8                                                                                 | 8                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 10.6                                                                                | 23.0                                                                                |                                                                                     | 23.0                                                                                | 23.0                                                                                |                                                                                     |

# Lanier Tract DRI

## 5: GA 53 & Lanier Valley Dr/Ahaluna Dr

existing a.m.

|                       |  |       |     |       |       |     |       |       |     |       |       |     |
|-----------------------|------------------------------------------------------------------------------------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Lane Group            | EBL                                                                                | EBT   | EBR | WBL   | WBT   | WBR | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
| Total Split (s)       | 25.0                                                                               | 25.0  |     | 25.0  | 25.0  |     | 13.0  | 125.0 |     | 112.0 | 112.0 |     |
| Total Split (%)       | 16.7%                                                                              | 16.7% |     | 16.7% | 16.7% |     | 8.7%  | 83.3% |     | 74.7% | 74.7% |     |
| Maximum Green (s)     | 18.4                                                                               | 18.4  |     | 18.4  | 18.4  |     | 7.4   | 118.9 |     | 105.9 | 105.9 |     |
| Yellow Time (s)       | 4.0                                                                                | 4.0   |     | 4.0   | 4.0   |     | 3.0   | 4.5   |     | 4.5   | 4.5   |     |
| All-Red Time (s)      | 2.6                                                                                | 2.6   |     | 2.6   | 2.6   |     | 2.6   | 1.6   |     | 1.6   | 1.6   |     |
| Lost Time Adjust (s)  |                                                                                    | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Lost Time (s)   |                                                                                    | 6.6   |     |       | 6.6   |     | 5.6   | 6.1   |     | 6.1   | 6.1   |     |
| Lead/Lag              |                                                                                    |       |     |       |       |     | Lead  |       |     | Lag   | Lag   |     |
| Lead-Lag Optimize?    |                                                                                    |       |     |       |       |     | Yes   |       |     | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0                                                                                | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode           | None                                                                               | None  |     | None  | None  |     | None  | C-Max |     | C-Max | C-Max |     |
| Act Effect Green (s)  |                                                                                    | 14.0  |     |       | 14.0  |     | 123.8 | 123.3 |     | 113.3 | 113.3 |     |
| Actuated g/C Ratio    |                                                                                    | 0.09  |     |       | 0.09  |     | 0.83  | 0.82  |     | 0.76  | 0.76  |     |
| v/c Ratio             |                                                                                    | 0.68  |     |       | 0.90  |     | 0.49  | 0.29  |     | 0.03  | 0.80  |     |
| Control Delay         |                                                                                    | 43.6  |     |       | 127.8 |     | 44.3  | 1.5   |     | 6.6   | 15.9  |     |
| Queue Delay           |                                                                                    | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay           |                                                                                    | 43.6  |     |       | 127.8 |     | 44.3  | 1.5   |     | 6.6   | 15.9  |     |
| LOS                   |                                                                                    | D     |     |       | F     |     | D     | A     |     | A     | B     |     |
| Approach Delay        |                                                                                    | 43.6  |     |       | 127.8 |     |       | 4.6   |     |       | 15.9  |     |
| Approach LOS          |                                                                                    | D     |     |       | F     |     |       | A     |     |       | B     |     |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 26 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 16.5

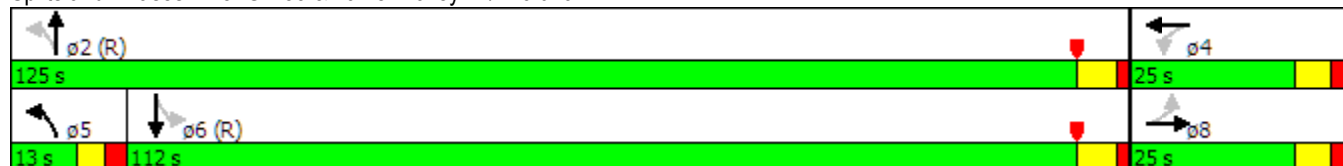
Intersection LOS: B

Intersection Capacity Utilization 73.2%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 5: GA 53 & Lanier Valley Dr/Ahaluna Dr



## Lanier Tract DRI

## 6: 53-Dawsonville Hwy &amp; Academy Sports

existing a.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |  |  |  |  |  |  |  |
| Volume (vph)               | 2                                                                                 | 0                                                                                 | 6                                                                                 | 2                                                                                 | 0                                                                                 | 0                                                                                 | 11                                                                                  | 740                                                                                 | 9                                                                                   | 5                                                                                   | 1989                                                                                | 4                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 4%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 70                                                                                | 200                                                                                 |                                                                                     | 170                                                                                 | 190                                                                                 |                                                                                     | 360                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1805                                                                              | 1900                                                                              | 1615                                                                              | 1769                                                                              | 1862                                                                              | 1862                                                                              | 1796                                                                                | 3556                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 0.058                                                                               |                                                                                     |                                                                                     | 0.329                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1900                                                                              | 1900                                                                              | 1615                                                                              | 1862                                                                              | 1862                                                                              | 1862                                                                              | 110                                                                                 | 3556                                                                                | 1607                                                                                | 625                                                                                 | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 67                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 68                                                                                  |                                                                                     |                                                                                     | 68                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 262                                                                               |                                                                                   |                                                                                   | 246                                                                               |                                                                                   |                                                                                     | 1836                                                                                |                                                                                     |                                                                                     | 685                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.1                                                                               |                                                                                   |                                                                                   | 6.7                                                                               |                                                                                   |                                                                                     | 27.8                                                                                |                                                                                     |                                                                                     | 10.4                                                                                |                                                                                     |
| Peak Hour Factor           | 0.67                                                                              | 0.67                                                                              | 0.67                                                                              | 0.50                                                                              | 0.50                                                                              | 0.50                                                                              | 0.86                                                                                | 0.86                                                                                | 0.86                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 3                                                                                 | 0                                                                                 | 9                                                                                 | 4                                                                                 | 0                                                                                 | 0                                                                                 | 13                                                                                  | 860                                                                                 | 10                                                                                  | 6                                                                                   | 2210                                                                                | 4                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 3                                                                                 | 0                                                                                 | 9                                                                                 | 4                                                                                 | 0                                                                                 | 0                                                                                 | 13                                                                                  | 860                                                                                 | 10                                                                                  | 6                                                                                   | 2210                                                                                | 4                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              |                                                                                   | Perm                                                                              | Perm                                                                              |                                                                                   | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 2                                                                                   |                                                                                     | 2                                                                                   | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 42.0                                                                              | 42.0                                                                              | 42.0                                                                              | 42.4                                                                              | 42.4                                                                              | 42.4                                                                              | 11.4                                                                                | 30.3                                                                                | 30.3                                                                                | 11.0                                                                                | 29.3                                                                                | 29.3                                                                                |

# Lanier Tract DRI

## 6: 53-Dawsonville Hwy & Academy Sports

existing a.m.

| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Total Split (s)         | 42.4  | 42.4  | 42.4  | 42.4  | 42.4  | 42.4  | 11.4  | 96.6  | 96.6  | 11.0  | 96.2  | 96.2  |
| Total Split (%)         | 28.3% | 28.3% | 28.3% | 28.3% | 28.3% | 28.3% | 7.6%  | 64.4% | 64.4% | 7.3%  | 64.1% | 64.1% |
| Maximum Green (s)       | 36.0  | 36.0  | 36.0  | 36.0  | 36.0  | 36.0  | 5.0   | 90.4  | 90.4  | 5.0   | 90.0  | 90.0  |
| Yellow Time (s)         | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 4.3   | 4.3   | 3.0   | 4.3   | 4.3   |
| All-Red Time (s)        | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 1.9   | 1.9   | 3.0   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.2   | 6.2   | 6.0   | 6.2   | 6.2   |
| Lead/Lag                |       |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None  | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 23.0  | 23.0  | 23.0  | 32.0  | 32.0  | 32.0  |       | 20.0  | 20.0  |       | 19.0  | 19.0  |
| Pedestrian Calls (#/hr) | 0     | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    | 6.1   |       | 6.1   | 6.1   |       |       | 137.2 | 139.9 | 139.9 | 136.1 | 137.4 | 137.4 |
| Actuated g/C Ratio      | 0.04  |       | 0.04  | 0.04  |       |       | 0.91  | 0.93  | 0.93  | 0.91  | 0.92  | 0.92  |
| v/c Ratio               | 0.04  |       | 0.07  | 0.05  |       |       | 0.08  | 0.26  | 0.01  | 0.01  | 0.67  | 0.00  |
| Control Delay           | 69.5  |       | 1.0   | 70.0  |       |       | 1.5   | 0.8   | 0.0   | 1.0   | 1.8   | 0.0   |
| Queue Delay             | 0.0   |       | 0.0   | 0.0   |       |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay             | 69.5  |       | 1.0   | 70.0  |       |       | 1.5   | 0.8   | 0.0   | 1.0   | 1.9   | 0.0   |
| LOS                     | E     |       | A     | E     |       |       | A     | A     | A     | A     | A     | A     |
| Approach Delay          |       |       |       |       |       |       |       | 0.8   |       |       | 1.8   |       |
| Approach LOS            |       |       |       |       |       |       |       | A     |       |       | A     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 27 (18%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 145

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.67

Intersection Signal Delay: 1.7

Intersection LOS: A

Intersection Capacity Utilization 79.1%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 6: 53-Dawsonville Hwy & Academy Sports

|        |    |        |        |        |    |
|--------|----|--------|--------|--------|----|
|        | ø1 |        | ø2 (R) |        | ø4 |
| 11 s   |    | 96.6 s |        | 42.4 s |    |
|        | ø5 |        | ø6 (R) |        | ø8 |
| 11.4 s |    | 96.2 s |        | 42.4 s |    |

## Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 &amp; McEver Road/McEver

existing a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |                                                                                   |   |  |  |  |  |  |
| Volume (vph)               | 390                                                                               | 28                                                                                | 342                                                                               | 42                                                                                | 19                                                                                | 18                                                                                | 282                                                                                 | 465                                                                                 | 55                                                                                  | 28                                                                                  | 1170                                                                                | 828                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 1%                                                                                |                                                                                   |                                                                                   | 5%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 180                                                                               |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 310                                                                                 |                                                                                     | 185                                                                                 | 255                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 50                                                                                |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.872                                                                             | 0.850                                                                             |                                                                                   | 0.927                                                                             |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 3484                                                                              | 1566                                                                              | 1527                                                                              | 1760                                                                              | 1717                                                                              | 0                                                                                 | 3484                                                                                | 3487                                                                                | 1575                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   | 0.629                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 3484                                                                              | 1566                                                                              | 1527                                                                              | 1165                                                                              | 1717                                                                              | 0                                                                                 | 3484                                                                                | 3487                                                                                | 1575                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 166                                                                               | 187                                                                               |                                                                                   | 29                                                                                |                                                                                   |                                                                                     |                                                                                     | 184                                                                                 |                                                                                     |                                                                                     | 538                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 45                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 580                                                                               |                                                                                   |                                                                                   | 331                                                                               |                                                                                   |                                                                                     | 921                                                                                 |                                                                                     |                                                                                     | 1624                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 8.8                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                     | 14.0                                                                                |                                                                                     |                                                                                     | 24.6                                                                                |                                                                                     |
| Peak Hour Factor           | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.62                                                                              | 0.62                                                                              | 0.62                                                                              | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 3%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 402                                                                               | 29                                                                                | 353                                                                               | 68                                                                                | 31                                                                                | 29                                                                                | 303                                                                                 | 500                                                                                 | 59                                                                                  | 31                                                                                  | 1300                                                                                | 920                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   | 47%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 402                                                                               | 195                                                                               | 187                                                                               | 68                                                                                | 60                                                                                | 0                                                                                 | 303                                                                                 | 500                                                                                 | 59                                                                                  | 31                                                                                  | 1300                                                                                | 920                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 24                                                                                |                                                                                   |                                                                                   | 24                                                                                |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                             | NA                                                                                |                                                                                   | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 8                                                                                 |                                                                                   | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 8                                                                                 | 8                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 13.2                                                                              | 50.2                                                                              | 50.2                                                                              | 11.6                                                                              | 48.2                                                                              |                                                                                   | 13.4                                                                                | 35.6                                                                                | 35.6                                                                                | 12.9                                                                                | 44.6                                                                                | 44.6                                                                                |

# Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 & McEver Road/McEver

existing a.m.

|                         |  |       |       |      |       |     |       |       |       |      |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|------|-------|-----|-------|-------|-------|------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL  | WBT   | WBR | NBL   | NBT   | NBR   | SBL  | SBT   | SBR   |
| Total Split (s)         | 24.0                                                                               | 60.4  | 60.4  | 11.8 | 48.2  |     | 20.2  | 63.9  | 63.9  | 13.9 | 57.6  | 57.6  |
| Total Split (%)         | 16.0%                                                                              | 40.3% | 40.3% | 7.9% | 32.1% |     | 13.5% | 42.6% | 42.6% | 9.3% | 38.4% | 38.4% |
| Maximum Green (s)       | 16.7                                                                               | 53.1  | 53.1  | 5.3  | 40.9  |     | 12.7  | 57.3  | 57.3  | 6.7  | 51.0  | 51.0  |
| Yellow Time (s)         | 4.3                                                                                | 4.3   | 4.3   | 3.5  | 4.3   |     | 4.5   | 4.4   | 4.4   | 4.2  | 4.4   | 4.4   |
| All-Red Time (s)        | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 2.2   | 2.2   | 3.0  | 2.2   | 2.2   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Lost Time (s)     | 7.3                                                                                | 7.3   | 7.3   | 6.5  | 7.3   |     | 7.5   | 6.6   | 6.6   | 7.2  | 6.6   | 6.6   |
| Lead/Lag                | Lead                                                                               | Lag   | Lag   | Lead | Lag   |     | Lag   | Lag   | Lag   | Lead | Lead  | Lead  |
| Lead-Lag Optimize?      | Yes                                                                                | Yes   | Yes   | Yes  | Yes   |     | Yes   | Yes   | Yes   | Yes  | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None | None  |     | None  | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s)           |                                                                                    | 4.0   | 4.0   |      | 4.0   |     |       | 4.0   | 4.0   |      | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    | 38.0  | 38.0  |      | 36.0  |     |       | 25.0  | 25.0  |      | 34.0  | 34.0  |
| Pedestrian Calls (#/hr) |                                                                                    | 0     | 0     |      | 0     |     |       | 0     | 0     |      | 0     | 0     |
| Act Effect Green (s)    | 16.7                                                                               | 20.5  | 20.5  | 13.3 | 8.5   |     | 12.7  | 96.3  | 96.3  | 8.0  | 86.0  | 86.0  |
| Actuated g/C Ratio      | 0.11                                                                               | 0.14  | 0.14  | 0.09 | 0.06  |     | 0.08  | 0.64  | 0.64  | 0.05 | 0.57  | 0.57  |
| v/c Ratio               | 1.04                                                                               | 0.55  | 0.51  | 0.55 | 0.48  |     | 1.03  | 0.22  | 0.05  | 0.32 | 0.63  | 0.79  |
| Control Delay           | 119.1                                                                              | 18.3  | 12.1  | 67.7 | 51.5  |     | 133.7 | 17.6  | 1.2   | 85.8 | 19.6  | 11.3  |
| Queue Delay             | 0.0                                                                                | 0.0   | 0.0   | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Delay             | 119.1                                                                              | 18.3  | 12.1  | 67.7 | 51.5  |     | 133.7 | 17.6  | 1.2   | 85.8 | 19.6  | 11.3  |
| LOS                     | F                                                                                  | B     | B     | E    | D     |     | F     | B     | A     | F    | B     | B     |
| Approach Delay          |                                                                                    | 68.5  |       |      | 60.1  |     |       | 57.3  |       |      | 17.1  |       |
| Approach LOS            |                                                                                    | E     |       |      | E     |     |       | E     |       |      | B     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 19 (13%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.04

Intersection Signal Delay: 37.1

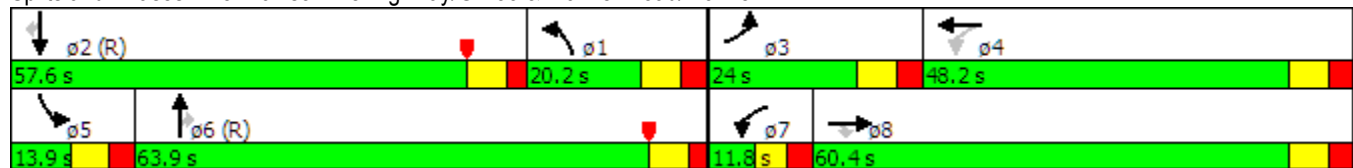
Intersection LOS: D

Intersection Capacity Utilization 81.3%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 8: Dawsonville Highway/GA 53 & McEver Road/McEver





## Lanier Tract DRI

## 9: Dawsonville Highway &amp; Greenhill Circle/Greenhill Circle

existing a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 67                                                                                | 1                                                                                 | 141                                                                               | 6                                                                                 | 1                                                                                 | 4                                                                                 | 135                                                                                 | 754                                                                                 | 10                                                                                  | 12                                                                                  | 1404                                                                                | 52                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 3%                                                                                |                                                                                   |                                                                                   | 7%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 190                                                                                 |                                                                                     | 190                                                                                 | 185                                                                                 |                                                                                     | 100                                                                                 |
| Storage Lanes              | 0                                                                                 |                                                                                   | 1                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              |                                                                                   | 0.953                                                                             |                                                                                   |                                                                                   | 0.957                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1784                                                                              | 1591                                                                              | 0                                                                                 | 1755                                                                              | 1558                                                                              | 1796                                                                                | 3522                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   | 0.722                                                                             |                                                                                   |                                                                                   | 0.755                                                                             |                                                                                   | 0.116                                                                               |                                                                                     |                                                                                     | 0.324                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1351                                                                              | 1591                                                                              | 0                                                                                 | 1384                                                                              | 1558                                                                              | 219                                                                                 | 3522                                                                                | 1607                                                                                | 616                                                                                 | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 151                                                                               |                                                                                   |                                                                                   | 102                                                                               |                                                                                     |                                                                                     | 57                                                                                  |                                                                                     |                                                                                     | 101                                                                                 |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 288                                                                               |                                                                                   |                                                                                   | 254                                                                               |                                                                                   |                                                                                     | 778                                                                                 |                                                                                     |                                                                                     | 921                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.9                                                                               |                                                                                   |                                                                                   | 6.9                                                                               |                                                                                   |                                                                                     | 11.8                                                                                |                                                                                     |                                                                                     | 14.0                                                                                |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.69                                                                              | 0.69                                                                              | 0.69                                                                              | 0.86                                                                                | 0.86                                                                                | 0.86                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 74                                                                                | 1                                                                                 | 157                                                                               | 9                                                                                 | 1                                                                                 | 6                                                                                 | 157                                                                                 | 877                                                                                 | 12                                                                                  | 13                                                                                  | 1526                                                                                | 57                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 75                                                                                | 157                                                                               | 0                                                                                 | 10                                                                                | 6                                                                                 | 157                                                                                 | 877                                                                                 | 12                                                                                  | 13                                                                                  | 1526                                                                                | 57                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.02                                                                              | 1.02                                                                              | 1.02                                                                              | 1.05                                                                              | 1.05                                                                              | 1.05                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              | 23.0                                                                              | 39.9                                                                              | 39.9                                                                              | 39.9                                                                              | 11.0                                                                                | 28.0                                                                                | 28.0                                                                                | 10.0                                                                                | 36.0                                                                                | 36.0                                                                                |

# Lanier Tract DRI

## 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle

existing a.m.

| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Total Split (s)         | 39.9  | 39.9  | 39.9  | 39.9  | 39.9  | 39.9  | 22.0  | 100.1 | 100.1 | 10.0  | 88.1  | 88.1  |
| Total Split (%)         | 26.6% | 26.6% | 26.6% | 26.6% | 26.6% | 26.6% | 14.7% | 66.7% | 66.7% | 6.7%  | 58.7% | 58.7% |
| Maximum Green (s)       | 34.0  | 34.0  | 34.0  | 34.0  | 34.0  | 34.0  | 16.0  | 94.1  | 94.1  | 5.0   | 82.1  | 82.1  |
| Yellow Time (s)         | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 4.4   | 4.4   | 3.5   | 4.4   | 4.4   |
| All-Red Time (s)        | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 3.0   | 1.6   | 1.6   | 1.5   | 1.6   | 1.6   |
| Lost Time Adjust (s)    |       | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |       | 5.9   | 5.9   |       | 5.9   | 5.9   | 6.0   | 6.0   | 6.0   | 5.0   | 6.0   | 6.0   |
| Lead/Lag                |       |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None  | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           |       |       |       | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     |       |       |       | 30.0  | 30.0  | 30.0  |       | 18.0  | 18.0  |       | 26.0  | 26.0  |
| Pedestrian Calls (#/hr) |       |       |       | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    |       | 13.7  | 13.7  |       | 13.7  | 13.7  | 124.4 | 120.0 | 120.0 | 113.0 | 106.3 | 106.3 |
| Actuated g/C Ratio      |       | 0.09  | 0.09  |       | 0.09  | 0.09  | 0.83  | 0.80  | 0.80  | 0.75  | 0.71  | 0.71  |
| v/c Ratio               |       | 0.61  | 0.56  |       | 0.08  | 0.03  | 0.51  | 0.31  | 0.01  | 0.03  | 0.60  | 0.05  |
| Control Delay           |       | 85.1  | 17.7  |       | 60.9  | 0.2   | 17.8  | 4.2   | 0.0   | 3.6   | 11.3  | 0.4   |
| Queue Delay             |       | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay             |       | 85.1  | 17.7  |       | 60.9  | 0.2   | 17.8  | 4.2   | 0.0   | 3.6   | 11.4  | 0.4   |
| LOS                     |       | F     | B     |       | E     | A     | B     | A     | A     | A     | B     | A     |
| Approach Delay          |       | 39.5  |       |       | 38.1  |       |       | 6.2   |       |       | 10.9  |       |
| Approach LOS            |       | D     |       |       | D     |       |       | A     |       |       | B     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.61

Intersection Signal Delay: 11.6

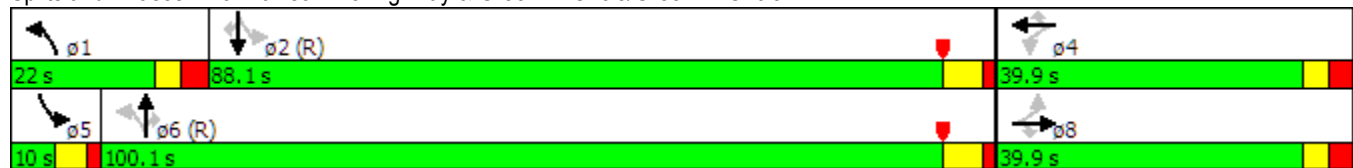
Intersection LOS: B

Intersection Capacity Utilization 71.6%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle



## Lanier Tract DRI

## 10: Dawsonville Highway &amp; Shallowford Rd/Best Buy

existing a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |                                                                                   |  |  |   |  |  |  |  |  |
| Volume (vph)               | 138                                                                               | 2                                                                                 | 8                                                                                 | 2                                                                                 | 4                                                                                 | 3                                                                                 | 10                                                                                  | 738                                                                                 | 13                                                                                  | 1                                                                                   | 1249                                                                                | 338                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | -1%                                                                               |                                                                                   |                                                                                   | 10%                                                                               |                                                                                   |                                                                                     | -4%                                                                                 |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 350                                                                               |                                                                                   | 350                                                                               | 0                                                                                 |                                                                                   | 0                                                                                 | 350                                                                                 |                                                                                     | 150                                                                                 | 265                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 100                                                                               |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             | 0.953                                                                             |                                                                                   |                                                                                   | 0.982                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1723                                                                              | 1729                                                                              | 1623                                                                              | 0                                                                                 | 1773                                                                              | 1534                                                                              | 1841                                                                                | 3646                                                                                | 1647                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             | 0.953                                                                             |                                                                                   |                                                                                   | 0.982                                                                             |                                                                                   | 0.154                                                                               |                                                                                     |                                                                                     | 0.320                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1723                                                                              | 1729                                                                              | 1623                                                                              | 0                                                                                 | 1773                                                                              | 1534                                                                              | 298                                                                                 | 3646                                                                                | 1647                                                                                | 611                                                                                 | 3592                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 113                                                                               |                                                                                   |                                                                                   | 119                                                                               |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     | 218                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 653                                                                               |                                                                                   |                                                                                   | 178                                                                               |                                                                                   |                                                                                     | 957                                                                                 |                                                                                     |                                                                                     | 778                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 9.9                                                                               |                                                                                   |                                                                                   | 4.9                                                                               |                                                                                   |                                                                                     | 14.5                                                                                |                                                                                     |                                                                                     | 11.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.84                                                                              | 0.84                                                                              | 0.84                                                                              | 0.56                                                                              | 0.56                                                                              | 0.56                                                                              | 0.83                                                                                | 0.83                                                                                | 0.83                                                                                | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 164                                                                               | 2                                                                                 | 10                                                                                | 4                                                                                 | 7                                                                                 | 5                                                                                 | 12                                                                                  | 889                                                                                 | 16                                                                                  | 1                                                                                   | 1343                                                                                | 363                                                                                 |
| Shared Lane Traffic (%)    | 49%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 84                                                                                | 82                                                                                | 10                                                                                | 0                                                                                 | 11                                                                                | 5                                                                                 | 12                                                                                  | 889                                                                                 | 16                                                                                  | 1                                                                                   | 1343                                                                                | 363                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 0.99                                                                              | 0.99                                                                              | 0.99                                                                              | 1.07                                                                              | 1.07                                                                              | 1.07                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Split                                                                             | NA                                                                                | Perm                                                                              | Split                                                                             | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | Perm                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 3                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 3                                                                                 | 3                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 36.7                                                                              | 36.7                                                                              | 36.7                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                                | 28.8                                                                                | 28.8                                                                                | 30.8                                                                                | 30.8                                                                                | 30.8                                                                                |

# Lanier Tract DRI

## 10: Dawsonville Highway & Shallowford Rd/Best Buy

existing a.m.

|                         |  |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 36.7                                                                               | 36.7  | 36.7  | 38.9  | 38.9  | 38.9  | 10.8  | 74.4  | 74.4  | 63.6  | 63.6  | 63.6  |
| Total Split (%)         | 24.5%                                                                              | 24.5% | 24.5% | 25.9% | 25.9% | 25.9% | 7.2%  | 49.6% | 49.6% | 42.4% | 42.4% | 42.4% |
| Maximum Green (s)       | 30.0                                                                               | 30.0  | 30.0  | 33.0  | 33.0  | 33.0  | 5.0   | 67.6  | 67.6  | 56.8  | 56.8  | 56.8  |
| Yellow Time (s)         | 4.5                                                                                | 4.5   | 4.5   | 3.0   | 3.0   | 3.0   | 3.0   | 4.9   | 4.9   | 4.9   | 4.9   | 4.9   |
| All-Red Time (s)        | 2.2                                                                                | 2.2   | 2.2   | 2.9   | 2.9   | 2.9   | 2.8   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.7                                                                                | 6.7   | 6.7   |       | 5.9   | 5.9   | 5.8   | 6.8   | 6.8   | 6.8   | 6.8   | 6.8   |
| Lead/Lag                | Lead                                                                               | Lead  | Lead  | Lag   | Lag   | Lag   | Lead  |       |       | Lag   | Lag   | Lag   |
| Lead-Lag Optimize?      | Yes                                                                                | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |       |       | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Min | C-Min | C-Min | C-Min | C-Min |
| Walk Time (s)           | 4.0                                                                                | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 26.0                                                                               | 26.0  | 26.0  | 29.0  | 29.0  | 29.0  |       | 18.0  | 18.0  | 20.0  | 20.0  | 20.0  |
| Pedestrian Calls (#/hr) | 0                                                                                  | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     | 0     | 0     | 0     |
| Act Effect Green (s)    | 12.7                                                                               | 12.7  | 12.7  |       | 6.5   | 6.5   | 119.4 | 118.4 | 118.4 | 113.7 | 113.7 | 113.7 |
| Actuated g/C Ratio      | 0.08                                                                               | 0.08  | 0.08  |       | 0.04  | 0.04  | 0.80  | 0.79  | 0.79  | 0.76  | 0.76  | 0.76  |
| v/c Ratio               | 0.58                                                                               | 0.56  | 0.04  |       | 0.14  | 0.03  | 0.04  | 0.31  | 0.01  | 0.00  | 0.49  | 0.28  |
| Control Delay           | 81.0                                                                               | 79.9  | 0.4   |       | 72.5  | 0.3   | 5.5   | 5.6   | 0.0   | 7.0   | 6.7   | 3.5   |
| Queue Delay             | 0.0                                                                                | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.2   | 0.0   |
| Total Delay             | 81.0                                                                               | 79.9  | 0.4   |       | 72.5  | 0.3   | 5.5   | 5.6   | 0.0   | 7.0   | 6.9   | 3.5   |
| LOS                     | F                                                                                  | E     | A     |       | E     | A     | A     | A     | A     | A     | A     | A     |
| Approach Delay          |                                                                                    | 75.9  |       |       | 49.9  |       |       | 5.5   |       |       | 6.2   |       |
| Approach LOS            |                                                                                    | E     |       |       | D     |       |       | A     |       |       | A     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 45 (30%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 10.6

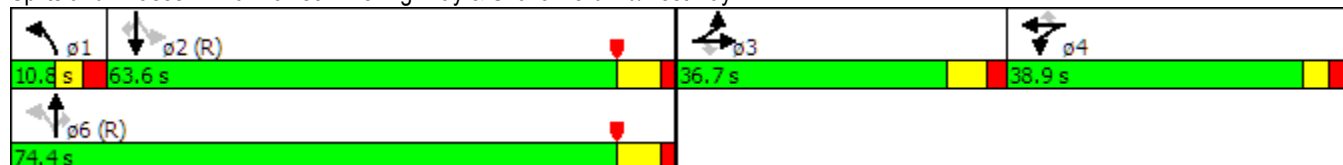
Intersection LOS: B

Intersection Capacity Utilization 59.0%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 10: Dawsonville Highway & Shallowford Rd/Best Buy



Lanier Tract DRI  
1: Sportsman Club Road & Strickland Drive

existing p.m.

| Intersection             |        |          |        |      |        |      |
|--------------------------|--------|----------|--------|------|--------|------|
| Int Delay, s/veh         | 1.6    |          |        |      |        |      |
|                          |        |          |        |      |        |      |
| Movement                 | WBL    | WBR      | NBT    | NBR  | SBL    | SBT  |
| Vol, veh/h               | 7      | 0        | 29     | 9    | 0      | 23   |
| Conflicting Peds, #/hr   | 0      | 0        | 0      | 0    | 0      | 0    |
| Sign Control             | Stop   | Stop     | Free   | Free | Free   | Free |
| RT Channelized           | -      | None     | -      | None | -      | None |
| Storage Length           | 0      | -        | -      | -    | -      | -    |
| Veh in Median Storage, # | 0      | -        | 0      | -    | -      | 0    |
| Grade, %                 | 0      | -        | 0      | -    | -      | 0    |
| Peak Hour Factor         | 44     | 44       | 86     | 86   | 82     | 82   |
| Heavy Vehicles, %        | 2      | 2        | 2      | 2    | 2      | 2    |
| Mvmt Flow                | 16     | 0        | 34     | 10   | 0      | 28   |
|                          |        |          |        |      |        |      |
| Major/Minor              | Minor1 |          | Major1 |      | Major2 |      |
| Conflicting Flow All     | 67     | 39       | 0      | 0    | 44     | 0    |
| Stage 1                  | 39     | -        | -      | -    | -      | -    |
| Stage 2                  | 28     | -        | -      | -    | -      | -    |
| Critical Hdwy            | 6.42   | 6.22     | -      | -    | 4.12   | -    |
| Critical Hdwy Stg 1      | 5.42   | -        | -      | -    | -      | -    |
| Critical Hdwy Stg 2      | 5.42   | -        | -      | -    | -      | -    |
| Follow-up Hdwy           | 3.518  | 3.318    | -      | -    | 2.218  | -    |
| Pot Cap-1 Maneuver       | 938    | 1033     | -      | -    | 1564   | -    |
| Stage 1                  | 983    | -        | -      | -    | -      | -    |
| Stage 2                  | 995    | -        | -      | -    | -      | -    |
| Platoon blocked, %       |        |          | -      | -    |        | -    |
| Mov Cap-1 Maneuver       | 938    | 1033     | -      | -    | 1564   | -    |
| Mov Cap-2 Maneuver       | 938    | -        | -      | -    | -      | -    |
| Stage 1                  | 983    | -        | -      | -    | -      | -    |
| Stage 2                  | 995    | -        | -      | -    | -      | -    |
|                          |        |          |        |      |        |      |
| Approach                 | WB     | NB       |        | SB   |        |      |
| HCM Control Delay, s     | 8.9    | 0        |        | 0    |        |      |
| HCM LOS                  | A      |          |        |      |        |      |
|                          |        |          |        |      |        |      |
| Minor Lane/Major Mvmt    | NBT    | NBRWBLn1 | SBL    | SBT  |        |      |
| Capacity (veh/h)         | -      | - 938    | 1564   | -    |        |      |
| HCM Lane V/C Ratio       | -      | - 0.017  | -      | -    |        |      |
| HCM Control Delay (s)    | -      | - 8.9    | 0      | -    |        |      |
| HCM Lane LOS             | -      | - A      | A      | -    |        |      |
| HCM 95th %tile Q(veh)    | -      | - 0.1    | 0      | -    |        |      |

Lanier Tract DRI  
2: GA 53 & Sportsman Club Road

existing p.m.

| Intersection               |        |                        |      |                            |       |      |                                |          |      |          |      |      |
|----------------------------|--------|------------------------|------|----------------------------|-------|------|--------------------------------|----------|------|----------|------|------|
| Int Delay, s/veh           |        | 17.3                   |      |                            |       |      |                                |          |      |          |      |      |
|                            |        |                        |      |                            |       |      |                                |          |      |          |      |      |
| Movement                   | EBL    | EBT                    | EBR  | WBL                        | WBT   | WBR  | NBL                            | NBT      | NBR  | SBL      | SBT  | SBR  |
| Vol, veh/h                 | 15     | 1039                   | 0    | 2                          | 1671  | 19   | 0                              | 0        | 0    | 28       | 0    | 9    |
| Conflicting Peds, #/hr     | 0      | 0                      | 0    | 0                          | 0     | 0    | 0                              | 0        | 0    | 0        | 0    | 0    |
| Sign Control               | Free   | Free                   | Free | Free                       | Free  | Free | Stop                           | Stop     | Stop | Stop     | Stop | Stop |
| RT Channelized             | -      | -                      | None | -                          | -     | None | -                              | -        | None | -        | -    | None |
| Storage Length             | 0      | -                      | -    | 0                          | -     | -    | -                              | -        | -    | -        | -    | -    |
| Veh in Median Storage, #   | -      | 0                      | -    | -                          | 0     | -    | -                              | 0        | -    | -        | 0    | -    |
| Grade, %                   | -      | 0                      | -    | -                          | 0     | -    | -                              | 0        | -    | -        | 0    | -    |
| Peak Hour Factor           | 95     | 95                     | 95   | 96                         | 96    | 96   | 92                             | 92       | 92   | 66       | 66   | 66   |
| Heavy Vehicles, %          | 2      | 2                      | 2    | 2                          | 2     | 2    | 2                              | 2        | 2    | 2        | 2    | 2    |
| Mvmt Flow                  | 16     | 1094                   | 0    | 2                          | 1741  | 20   | 0                              | 0        | 0    | 42       | 0    | 14   |
|                            |        |                        |      |                            |       |      |                                |          |      |          |      |      |
| Major/Minor                | Major1 |                        |      | Major2                     |       |      | Minor1                         |          |      | Minor2   |      |      |
| Conflicting Flow All       | 1760   | 0                      | 0    | 1094                       | 0     | 0    | 1999                           | 2890     | 547  | 2333     | 2880 | 880  |
| Stage 1                    | -      | -                      | -    | -                          | -     | -    | 1125                           | 1125     | -    | 1755     | 1755 | -    |
| Stage 2                    | -      | -                      | -    | -                          | -     | -    | 874                            | 1765     | -    | 578      | 1125 | -    |
| Critical Hdwy              | 4.14   | -                      | -    | 4.14                       | -     | -    | 7.54                           | 6.54     | 6.94 | 7.54     | 6.54 | 6.94 |
| Critical Hdwy Stg 1        | -      | -                      | -    | -                          | -     | -    | 6.54                           | 5.54     | -    | 6.54     | 5.54 | -    |
| Critical Hdwy Stg 2        | -      | -                      | -    | -                          | -     | -    | 6.54                           | 5.54     | -    | 6.54     | 5.54 | -    |
| Follow-up Hdwy             | 2.22   | -                      | -    | 2.22                       | -     | -    | 3.52                           | 4.02     | 3.32 | 3.52     | 4.02 | 3.32 |
| Pot Cap-1 Maneuver         | 351    | -                      | -    | 634                        | -     | -    | 35                             | 16       | 481  | ~ 20     | 16   | 290  |
| Stage 1                    | -      | -                      | -    | -                          | -     | -    | 218                            | 278      | -    | 88       | 137  | -    |
| Stage 2                    | -      | -                      | -    | -                          | -     | -    | 311                            | 136      | -    | 468      | 278  | -    |
| Platoon blocked, %         |        | -                      | -    |                            | -     | -    |                                |          |      |          |      |      |
| Mov Cap-1 Maneuver         | 351    | -                      | -    | 634                        | -     | -    | 32                             | 15       | 481  | ~ 19     | 15   | 290  |
| Mov Cap-2 Maneuver         | -      | -                      | -    | -                          | -     | -    | 32                             | 15       | -    | ~ 19     | 15   | -    |
| Stage 1                    | -      | -                      | -    | -                          | -     | -    | 208                            | 265      | -    | 84       | 137  | -    |
| Stage 2                    | -      | -                      | -    | -                          | -     | -    | 295                            | 136      | -    | 447      | 265  | -    |
|                            |        |                        |      |                            |       |      |                                |          |      |          |      |      |
| Approach                   | EB     |                        |      | WB                         |       |      | NB                             |          |      | SB       |      |      |
| HCM Control Delay, s       | 0.2    |                        |      | 0                          |       |      | 0                              |          |      | \$ 901.3 |      |      |
| HCM LOS                    |        |                        |      |                            |       |      | A                              |          |      | F        |      |      |
|                            |        |                        |      |                            |       |      |                                |          |      |          |      |      |
| Minor Lane/Major Mvmt      | NBLn1  | EBL                    | EBT  | EBR                        | WBL   | WBT  | WBR                            | SBLn1    |      |          |      |      |
| Capacity (veh/h)           | -      | 351                    | -    | -                          | 634   | -    | -                              | 25       |      |          |      |      |
| HCM Lane V/C Ratio         | -      | 0.045                  | -    | -                          | 0.003 | -    | -                              | 2.242    |      |          |      |      |
| HCM Control Delay (s)      | 0      | 15.7                   | -    | -                          | 10.7  | -    | -                              | \$ 901.3 |      |          |      |      |
| HCM Lane LOS               | A      | C                      | -    | -                          | B     | -    | -                              | F        |      |          |      |      |
| HCM 95th %tile Q(veh)      | -      | 0.1                    | -    | -                          | 0     | -    | -                              | 6.9      |      |          |      |      |
| Notes                      |        |                        |      |                            |       |      |                                |          |      |          |      |      |
| ~: Volume exceeds capacity |        | \$: Delay exceeds 300s |      | +: Computation Not Defined |       |      | *: All major volume in platoon |          |      |          |      |      |

| Intersection             |        |        |       |        |      |      |
|--------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh         | 1.2    |        |       |        |      |      |
|                          |        |        |       |        |      |      |
|                          |        |        |       |        |      |      |
| Movement                 | EBL    | EBR    | NBL   | NBT    | SBT  | SBR  |
| Vol, veh/h               | 11     | 47     | 62    | 1650   | 1104 | 14   |
| Conflicting Peds, #/hr   | 0      | 0      | 0     | 0      | 0    | 0    |
| Sign Control             | Stop   | Stop   | Free  | Free   | Free | Free |
| RT Channelized           | -      | None   | -     | None   | -    | None |
| Storage Length           | 0      | 0      | 0     | -      | -    | 0    |
| Veh in Median Storage, # | 0      | -      | -     | 0      | 0    | -    |
| Grade, %                 | 0      | -      | -     | 0      | 0    | -    |
| Peak Hour Factor         | 76     | 76     | 95    | 95     | 100  | 100  |
| Heavy Vehicles, %        | 2      | 2      | 2     | 2      | 2    | 2    |
| Mvmt Flow                | 14     | 62     | 65    | 1737   | 1104 | 14   |
|                          |        |        |       |        |      |      |
| Major/Minor              | Minor2 | Major1 |       | Major2 |      |      |
| Conflicting Flow All     | 2103   | 552    | 1104  | 0      | -    | 0    |
| Stage 1                  | 1104   | -      | -     | -      | -    | -    |
| Stage 2                  | 999    | -      | -     | -      | -    | -    |
| Critical Hdwy            | 6.84   | 6.94   | 4.14  | -      | -    | -    |
| Critical Hdwy Stg 1      | 5.84   | -      | -     | -      | -    | -    |
| Critical Hdwy Stg 2      | 5.84   | -      | -     | -      | -    | -    |
| Follow-up Hdwy           | 3.52   | 3.32   | 2.22  | -      | -    | -    |
| Pot Cap-1 Maneuver       | 44     | 477    | 628   | -      | -    | -    |
| Stage 1                  | 279    | -      | -     | -      | -    | -    |
| Stage 2                  | 317    | -      | -     | -      | -    | -    |
| Platoon blocked, %       |        |        |       | -      | -    | -    |
| Mov Cap-1 Maneuver       | 39     | 477    | 628   | -      | -    | -    |
| Mov Cap-2 Maneuver       | 39     | -      | -     | -      | -    | -    |
| Stage 1                  | 279    | -      | -     | -      | -    | -    |
| Stage 2                  | 284    | -      | -     | -      | -    | -    |
|                          |        |        |       |        |      |      |
| Approach                 | EB     | NB     |       | SB     |      |      |
| HCM Control Delay, s     | 38.4   | 0.4    |       | 0      |      |      |
| HCM LOS                  | E      |        |       |        |      |      |
|                          |        |        |       |        |      |      |
| Minor Lane/Major Mvmt    | NBL    | NBT    | EBLn1 | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)         | 628    | -      | 39    | 477    | -    | -    |
| HCM Lane V/C Ratio       | 0.104  | -      | 0.371 | 0.13   | -    | -    |
| HCM Control Delay (s)    | 11.4   | -      | 144.1 | 13.7   | -    | -    |
| HCM Lane LOS             | B      | -      | F     | B      | -    | -    |
| HCM 95th %tile Q(veh)    | 0.3    | -      | 1.3   | 0.4    | -    | -    |

Lanier Tract DRI  
4: Canterbury Road & GA 53

existing p.m.

| Intersection             |        |        |       |        |      |      |
|--------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh         | 1.2    |        |       |        |      |      |
|                          |        |        |       |        |      |      |
| Movement                 | EBL    | EBR    | NBL   | NBT    | SBT  | SBR  |
| Vol, veh/h               | 7      | 28     | 111   | 1682   | 1105 | 14   |
| Conflicting Peds, #/hr   | 0      | 0      | 0     | 0      | 0    | 0    |
| Sign Control             | Stop   | Stop   | Free  | Free   | Free | Free |
| RT Channelized           | -      | None   | -     | None   | -    | None |
| Storage Length           | 0      | 0      | 0     | -      | -    | 0    |
| Veh in Median Storage, # | 0      | -      | -     | 0      | 0    | -    |
| Grade, %                 | 0      | -      | -     | 0      | 0    | -    |
| Peak Hour Factor         | 80     | 80     | 96    | 96     | 96   | 96   |
| Heavy Vehicles, %        | 2      | 2      | 2     | 2      | 2    | 2    |
| Mvmt Flow                | 9      | 35     | 116   | 1752   | 1151 | 15   |
|                          |        |        |       |        |      |      |
| Major/Minor              | Minor2 | Major1 |       | Major2 |      |      |
| Conflicting Flow All     | 2258   | 576    | 1151  | 0      | -    | 0    |
| Stage 1                  | 1151   | -      | -     | -      | -    | -    |
| Stage 2                  | 1107   | -      | -     | -      | -    | -    |
| Critical Hdwy            | 6.84   | 6.94   | 4.14  | -      | -    | -    |
| Critical Hdwy Stg 1      | 5.84   | -      | -     | -      | -    | -    |
| Critical Hdwy Stg 2      | 5.84   | -      | -     | -      | -    | -    |
| Follow-up Hdwy           | 3.52   | 3.32   | 2.22  | -      | -    | -    |
| Pot Cap-1 Maneuver       | 35     | 460    | 603   | -      | -    | -    |
| Stage 1                  | 263    | -      | -     | -      | -    | -    |
| Stage 2                  | 278    | -      | -     | -      | -    | -    |
| Platoon blocked, %       |        |        |       | -      | -    | -    |
| Mov Cap-1 Maneuver       | 28     | 460    | 603   | -      | -    | -    |
| Mov Cap-2 Maneuver       | 28     | -      | -     | -      | -    | -    |
| Stage 1                  | 263    | -      | -     | -      | -    | -    |
| Stage 2                  | 225    | -      | -     | -      | -    | -    |
|                          |        |        |       |        |      |      |
| Approach                 | EB     | NB     |       | SB     |      |      |
| HCM Control Delay, s     | 47.6   | 0.8    |       | 0      |      |      |
| HCM LOS                  | E      |        |       |        |      |      |
|                          |        |        |       |        |      |      |
| Minor Lane/Major Mvmt    | NBL    | NBT    | EBLn1 | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)         | 603    | -      | 28    | 460    | -    | -    |
| HCM Lane V/C Ratio       | 0.192  | -      | 0.313 | 0.076  | -    | -    |
| HCM Control Delay (s)    | 12.4   | -      | 183.8 | 13.5   | -    | -    |
| HCM Lane LOS             | B      | -      | F     | B      | -    | -    |
| HCM 95th %tile Q(veh)    | 0.7    | -      | 1     | 0.2    | -    | -    |



Lanier Tract DRI  
7: GA 53 & Beechwood Boulevard

existing p.m.

| Intersection             |        |        |       |        |      |      |
|--------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh         | 0.7    |        |       |        |      |      |
| Movement                 | EBL    | EBR    | NBL   | NBT    | SBT  | SBR  |
| Vol, veh/h               | 1      | 47     | 86    | 1998   | 1388 | 9    |
| Conflicting Peds, #/hr   | 0      | 0      | 0     | 0      | 0    | 0    |
| Sign Control             | Stop   | Stop   | Free  | Free   | Free | Free |
| RT Channelized           | -      | Yield  | -     | Yield  | -    | None |
| Storage Length           | 0      | 0      | 200   | -      | -    | 360  |
| Veh in Median Storage, # | 0      | -      | -     | 0      | 0    | -    |
| Grade, %                 | 0      | -      | -     | 1      | 0    | -    |
| Peak Hour Factor         | 71     | 71     | 99    | 99     | 98   | 98   |
| Heavy Vehicles, %        | 0      | 0      | 0     | 0      | 1    | 0    |
| Mvmt Flow                | 1      | 66     | 87    | 2018   | 1416 | 9    |
| Major/Minor              | Minor2 | Major1 |       | Major2 |      |      |
| Conflicting Flow All     | 2599   | 709    | 1416  | 0      | -    | 0    |
| Stage 1                  | 1416   | -      | -     | -      | -    | -    |
| Stage 2                  | 1183   | -      | -     | -      | -    | -    |
| Critical Hdwy            | 6.8    | 6.9    | 4.1   | -      | -    | -    |
| Critical Hdwy Stg 1      | 5.8    | -      | -     | -      | -    | -    |
| Critical Hdwy Stg 2      | 5.8    | -      | -     | -      | -    | -    |
| Follow-up Hdwy           | 3.5    | 3.3    | 2.2   | -      | -    | -    |
| Pot Cap-1 Maneuver       | 21     | 381    | 487   | -      | -    | -    |
| Stage 1                  | 193    | -      | -     | -      | -    | -    |
| Stage 2                  | 257    | -      | -     | -      | -    | -    |
| Platoon blocked, %       |        |        |       | -      | -    | -    |
| Mov Cap-1 Maneuver       | 17     | 381    | 487   | -      | -    | -    |
| Mov Cap-2 Maneuver       | 17     | -      | -     | -      | -    | -    |
| Stage 1                  | 193    | -      | -     | -      | -    | -    |
| Stage 2                  | 211    | -      | -     | -      | -    | -    |
| Approach                 | EB     | NB     |       | SB     |      |      |
| HCM Control Delay, s     | 21     | 0.6    |       | 0      |      |      |
| HCM LOS                  | C      |        |       |        |      |      |
| Minor Lane/Major Mvmt    | NBL    | NBT    | EBLn1 | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)         | 487    | -      | 17    | 381    | -    | -    |
| HCM Lane V/C Ratio       | 0.178  | -      | 0.083 | 0.174  | -    | -    |
| HCM Control Delay (s)    | 14     | -      | 235.1 | 16.4   | -    | -    |
| HCM Lane LOS             | B      | -      | F     | C      | -    | -    |
| HCM 95th %tile Q(veh)    | 0.6    | -      | 0.2   | 0.6    | -    | -    |

# Lanier Tract DRI

## 5: GA 53 & Lanier Valley Dr/Ahaluna Dr

existing p.m.

| Lane Group            | EBL   | EBT   | EBR | WBL   | WBT   | WBR | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
|-----------------------|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Total Split (s)       | 33.0  | 33.0  |     | 33.0  | 33.0  |     | 28.0  | 127.0 |     | 99.0  | 99.0  |     |
| Total Split (%)       | 20.6% | 20.6% |     | 20.6% | 20.6% |     | 17.5% | 79.4% |     | 61.9% | 61.9% |     |
| Maximum Green (s)     | 26.4  | 26.4  |     | 26.4  | 26.4  |     | 22.4  | 120.9 |     | 92.9  | 92.9  |     |
| Yellow Time (s)       | 4.0   | 4.0   |     | 4.0   | 4.0   |     | 3.0   | 4.5   |     | 4.5   | 4.5   |     |
| All-Red Time (s)      | 2.6   | 2.6   |     | 2.6   | 2.6   |     | 2.6   | 1.6   |     | 1.6   | 1.6   |     |
| Lost Time Adjust (s)  |       | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Lost Time (s)   |       | 6.6   |     |       | 6.6   |     | 5.6   | 6.1   |     | 6.1   | 6.1   |     |
| Lead/Lag              |       |       |     |       |       |     | Lead  |       |     | Lag   | Lag   |     |
| Lead-Lag Optimize?    |       |       |     |       |       |     | Yes   |       |     | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode           | None  | None  |     | None  | None  |     | None  | C-Max |     | C-Max | C-Max |     |
| Act Effect Green (s)  |       | 15.5  |     |       | 15.5  |     | 132.3 | 131.8 |     | 117.1 | 117.1 |     |
| Actuated g/C Ratio    |       | 0.10  |     |       | 0.10  |     | 0.83  | 0.82  |     | 0.73  | 0.73  |     |
| v/c Ratio             |       | 0.56  |     |       | 0.85  |     | 0.52  | 0.63  |     | 0.15  | 0.48  |     |
| Control Delay         |       | 26.1  |     |       | 97.4  |     | 9.9   | 8.5   |     | 11.5  | 10.4  |     |
| Queue Delay           |       | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay           |       | 26.1  |     |       | 97.4  |     | 9.9   | 8.5   |     | 11.5  | 10.4  |     |
| LOS                   |       | C     |     |       | F     |     | A     | A     |     | B     | B     |     |
| Approach Delay        |       | 26.1  |     |       | 97.4  |     |       | 8.6   |     |       | 10.4  |     |
| Approach LOS          |       | C     |     |       | F     |     |       | A     |     |       | B     |     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 129 (81%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 12.7

Intersection LOS: B

Intersection Capacity Utilization 79.8%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 5: GA 53 & Lanier Valley Dr/Ahaluna Dr



## Lanier Tract DRI

## 6: 53-Dawsonville Hwy &amp; Academy Sports

existing p.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |  |  |  |  |  |  |  |
| Volume (vph)               | 13                                                                                | 3                                                                                 | 60                                                                                | 118                                                                               | 7                                                                                 | 42                                                                                | 87                                                                                  | 1763                                                                                | 138                                                                                 | 19                                                                                  | 1199                                                                                | 27                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 4%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 70                                                                                | 200                                                                                 |                                                                                     | 170                                                                                 | 190                                                                                 |                                                                                     | 360                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1805                                                                              | 1900                                                                              | 1615                                                                              | 1769                                                                              | 1862                                                                              | 1583                                                                              | 1796                                                                                | 3592                                                                                | 1607                                                                                | 1805                                                                                | 3574                                                                                | 1615                                                                                |
| Flt Permitted              | 0.752                                                                             |                                                                                   |                                                                                   | 0.756                                                                             |                                                                                   |                                                                                   | 0.177                                                                               |                                                                                     |                                                                                     | 0.083                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1429                                                                              | 1900                                                                              | 1615                                                                              | 1408                                                                              | 1862                                                                              | 1583                                                                              | 335                                                                                 | 3592                                                                                | 1607                                                                                | 158                                                                                 | 3574                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 63                                                                                |                                                                                   |                                                                                   | 63                                                                                |                                                                                     |                                                                                     | 69                                                                                  |                                                                                     |                                                                                     | 64                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 262                                                                               |                                                                                   |                                                                                   | 246                                                                               |                                                                                   |                                                                                     | 1836                                                                                |                                                                                     |                                                                                     | 685                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.1                                                                               |                                                                                   |                                                                                   | 6.7                                                                               |                                                                                   |                                                                                     | 27.8                                                                                |                                                                                     |                                                                                     | 10.4                                                                                |                                                                                     |
| Peak Hour Factor           | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.80                                                                              | 0.80                                                                              | 0.80                                                                              | 0.98                                                                                | 0.98                                                                                | 0.98                                                                                | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 14                                                                                | 3                                                                                 | 63                                                                                | 148                                                                               | 9                                                                                 | 52                                                                                | 89                                                                                  | 1799                                                                                | 141                                                                                 | 20                                                                                  | 1236                                                                                | 28                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 14                                                                                | 3                                                                                 | 63                                                                                | 148                                                                               | 9                                                                                 | 52                                                                                | 89                                                                                  | 1799                                                                                | 141                                                                                 | 20                                                                                  | 1236                                                                                | 28                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 2                                                                                   |                                                                                     | 2                                                                                   | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 42.0                                                                              | 42.0                                                                              | 42.0                                                                              | 42.4                                                                              | 42.4                                                                              | 42.4                                                                              | 11.4                                                                                | 30.3                                                                                | 30.3                                                                                | 11.0                                                                                | 29.3                                                                                | 29.3                                                                                |

# Lanier Tract DRI

## 6: 53-Dawsonville Hwy & Academy Sports

existing p.m.

|                         |  |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 43.0                                                                               | 43.0  | 43.0  | 43.0  | 43.0  | 43.0  | 13.6  | 106.0 | 106.0 | 11.0  | 103.4 | 103.4 |
| Total Split (%)         | 26.9%                                                                              | 26.9% | 26.9% | 26.9% | 26.9% | 26.9% | 8.5%  | 66.3% | 66.3% | 6.9%  | 64.6% | 64.6% |
| Maximum Green (s)       | 36.6                                                                               | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  | 7.2   | 99.8  | 99.8  | 5.0   | 97.2  | 97.2  |
| Yellow Time (s)         | 3.4                                                                                | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 4.3   | 4.3   | 3.0   | 4.3   | 4.3   |
| All-Red Time (s)        | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 1.9   | 1.9   | 3.0   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.4                                                                                | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.2   | 6.2   | 6.0   | 6.2   | 6.2   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           | 4.0                                                                                | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 23.0                                                                               | 23.0  | 23.0  | 32.0  | 32.0  | 32.0  |       | 20.0  | 20.0  |       | 19.0  | 19.0  |
| Pedestrian Calls (#/hr) | 0                                                                                  | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    | 22.1                                                                               | 22.1  | 22.1  | 22.1  | 22.1  | 22.1  | 122.7 | 118.0 | 118.0 | 117.5 | 111.4 | 111.4 |
| Actuated g/C Ratio      | 0.14                                                                               | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.77  | 0.74  | 0.74  | 0.73  | 0.70  | 0.70  |
| v/c Ratio               | 0.07                                                                               | 0.01  | 0.23  | 0.76  | 0.04  | 0.19  | 0.27  | 0.68  | 0.12  | 0.11  | 0.50  | 0.02  |
| Control Delay           | 57.2                                                                               | 55.0  | 13.8  | 89.5  | 56.0  | 9.9   | 7.8   | 13.6  | 6.8   | 5.5   | 8.9   | 0.0   |
| Queue Delay             | 0.0                                                                                | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.1   | 0.0   |
| Total Delay             | 57.2                                                                               | 55.0  | 13.8  | 89.5  | 56.0  | 9.9   | 7.8   | 13.6  | 6.8   | 5.5   | 9.0   | 0.0   |
| LOS                     | E                                                                                  | D     | B     | F     | E     | A     | A     | B     | A     | A     | A     | A     |
| Approach Delay          |                                                                                    | 22.9  |       |       | 68.3  |       |       | 12.9  |       |       | 8.7   |       |
| Approach LOS            |                                                                                    | C     |       |       | E     |       |       | B     |       |       | A     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 120 (75%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 115

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.76

Intersection Signal Delay: 14.8

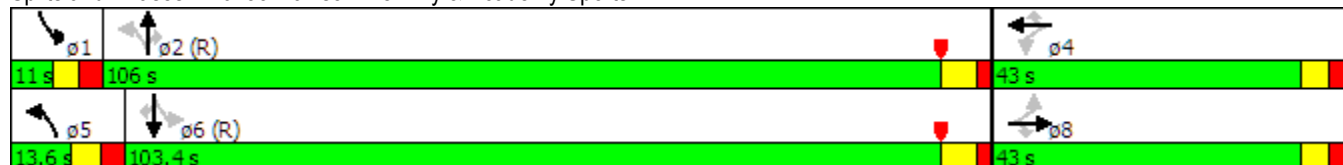
Intersection LOS: B

Intersection Capacity Utilization 81.6%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 6: 53-Dawsonville Hwy & Academy Sports



## Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 &amp; McEver Road/McEver

existing p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |                                                                                   |   |  |  |  |  |  |
| Volume (vph)               | 845                                                                               | 213                                                                               | 386                                                                               | 87                                                                                | 91                                                                                | 81                                                                                | 433                                                                                 | 1362                                                                                | 46                                                                                  | 62                                                                                  | 1029                                                                                | 481                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 1%                                                                                |                                                                                   |                                                                                   | 5%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 180                                                                               |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 310                                                                                 |                                                                                     | 185                                                                                 | 255                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 50                                                                                |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.951                                                                             | 0.850                                                                             |                                                                                   | 0.929                                                                             |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 3484                                                                              | 1708                                                                              | 1527                                                                              | 1760                                                                              | 1721                                                                              | 0                                                                                 | 3484                                                                                | 3592                                                                                | 1607                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   | 0.550                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 3484                                                                              | 1708                                                                              | 1527                                                                              | 1019                                                                              | 1721                                                                              | 0                                                                                 | 3484                                                                                | 3592                                                                                | 1607                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 19                                                                                | 296                                                                               |                                                                                   | 27                                                                                |                                                                                   |                                                                                     |                                                                                     | 172                                                                                 |                                                                                     |                                                                                     | 307                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 580                                                                               |                                                                                   |                                                                                   | 331                                                                               |                                                                                   |                                                                                     | 921                                                                                 |                                                                                     |                                                                                     | 1504                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 8.8                                                                               |                                                                                   |                                                                                   | 9.0                                                                               |                                                                                   |                                                                                     | 14.0                                                                                |                                                                                     |                                                                                     | 22.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.86                                                                              | 0.86                                                                              | 0.86                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 889                                                                               | 224                                                                               | 406                                                                               | 101                                                                               | 106                                                                               | 94                                                                                | 446                                                                                 | 1404                                                                                | 47                                                                                  | 68                                                                                  | 1131                                                                                | 529                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   | 27%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 889                                                                               | 334                                                                               | 296                                                                               | 101                                                                               | 200                                                                               | 0                                                                                 | 446                                                                                 | 1404                                                                                | 47                                                                                  | 68                                                                                  | 1131                                                                                | 529                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 24                                                                                |                                                                                   |                                                                                   | 24                                                                                |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                             | NA                                                                                |                                                                                   | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 8                                                                                 |                                                                                   | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 8                                                                                 | 8                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 13.2                                                                              | 50.2                                                                              | 50.2                                                                              | 11.6                                                                              | 48.2                                                                              |                                                                                   | 13.4                                                                                | 35.6                                                                                | 35.6                                                                                | 12.9                                                                                | 44.6                                                                                | 44.6                                                                                |

# Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 & McEver Road/McEver

existing p.m.

|                         |  |       |       |      |       |     |       |       |       |      |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|------|-------|-----|-------|-------|-------|------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL  | WBT   | WBR | NBL   | NBT   | NBR   | SBL  | SBT   | SBR   |
| Total Split (s)         | 37.0                                                                               | 72.1  | 72.1  | 13.1 | 48.2  |     | 23.0  | 61.8  | 61.8  | 13.0 | 51.8  | 51.8  |
| Total Split (%)         | 23.1%                                                                              | 45.1% | 45.1% | 8.2% | 30.1% |     | 14.4% | 38.6% | 38.6% | 8.1% | 32.4% | 32.4% |
| Maximum Green (s)       | 29.7                                                                               | 64.8  | 64.8  | 6.6  | 40.9  |     | 15.5  | 55.2  | 55.2  | 5.8  | 45.2  | 45.2  |
| Yellow Time (s)         | 4.3                                                                                | 4.3   | 4.3   | 3.5  | 4.3   |     | 4.5   | 4.4   | 4.4   | 4.2  | 4.4   | 4.4   |
| All-Red Time (s)        | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 2.2   | 2.2   | 3.0  | 2.2   | 2.2   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Lost Time (s)     | 7.3                                                                                | 7.3   | 7.3   | 6.5  | 7.3   |     | 7.5   | 6.6   | 6.6   | 7.2  | 6.6   | 6.6   |
| Lead/Lag                | Lead                                                                               | Lag   | Lag   | Lead | Lag   |     | Lag   | Lag   | Lag   | Lead | Lead  | Lead  |
| Lead-Lag Optimize?      | Yes                                                                                | Yes   | Yes   | Yes  | Yes   |     | Yes   | Yes   | Yes   | Yes  | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None | None  |     | None  | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s)           |                                                                                    | 4.0   | 4.0   |      | 4.0   |     |       | 4.0   | 4.0   |      | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    | 38.0  | 38.0  |      | 36.0  |     |       | 25.0  | 25.0  |      | 34.0  | 34.0  |
| Pedestrian Calls (#/hr) |                                                                                    | 0     | 0     |      | 0     |     |       | 0     | 0     |      | 0     | 0     |
| Act Effect Green (s)    | 29.7                                                                               | 45.6  | 45.6  | 29.1 | 21.7  |     | 15.5  | 66.4  | 66.4  | 13.8 | 64.4  | 64.4  |
| Actuated g/C Ratio      | 0.19                                                                               | 0.28  | 0.28  | 0.18 | 0.14  |     | 0.10  | 0.42  | 0.42  | 0.09 | 0.40  | 0.40  |
| v/c Ratio               | 1.38                                                                               | 0.67  | 0.46  | 0.47 | 0.78  |     | 1.32  | 0.94  | 0.06  | 0.44 | 0.78  | 0.63  |
| Control Delay           | 225.2                                                                              | 53.9  | 6.2   | 45.5 | 77.5  |     | 221.7 | 71.5  | 0.1   | 73.5 | 62.2  | 34.7  |
| Queue Delay             | 0.0                                                                                | 0.4   | 0.1   | 1.2  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Delay             | 225.2                                                                              | 54.3  | 6.4   | 46.7 | 77.5  |     | 221.7 | 71.5  | 0.1   | 73.5 | 62.2  | 34.7  |
| LOS                     | F                                                                                  | D     | A     | D    | E     |     | F     | E     | A     | E    | E     | C     |
| Approach Delay          |                                                                                    | 145.0 |       |      | 67.2  |     |       | 105.0 |       |      | 54.2  |       |
| Approach LOS            |                                                                                    | F     |       |      | E     |     |       | F     |       |      | D     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 52 (33%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.38

Intersection Signal Delay: 98.0

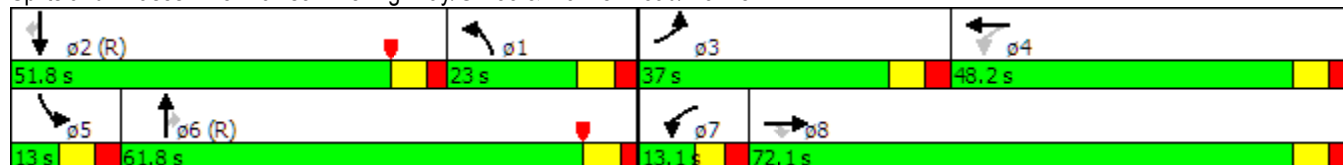
Intersection LOS: F

Intersection Capacity Utilization 99.3%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 8: Dawsonville Highway/GA 53 & McEver Road/McEver



## Lanier Tract DRI

## 9: Dawsonville Highway &amp; Greenhill Circle/Greenhill Circle

existing p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 132                                                                               | 9                                                                                 | 138                                                                               | 60                                                                                | 20                                                                                | 38                                                                                | 248                                                                                 | 1749                                                                                | 70                                                                                  | 40                                                                                  | 1392                                                                                | 53                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 3%                                                                                |                                                                                   |                                                                                   | 7%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 190                                                                                 |                                                                                     | 190                                                                                 | 185                                                                                 |                                                                                     | 100                                                                                 |
| Storage Lanes              | 0                                                                                 |                                                                                   | 1                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              |                                                                                   | 0.955                                                                             |                                                                                   |                                                                                   | 0.964                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1787                                                                              | 1591                                                                              | 0                                                                                 | 1767                                                                              | 1558                                                                              | 1796                                                                                | 3592                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   | 0.608                                                                             |                                                                                   |                                                                                   | 0.504                                                                             |                                                                                   | 0.091                                                                               |                                                                                     |                                                                                     | 0.088                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1138                                                                              | 1591                                                                              | 0                                                                                 | 924                                                                               | 1558                                                                              | 172                                                                                 | 3592                                                                                | 1607                                                                                | 167                                                                                 | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 152                                                                               |                                                                                   |                                                                                   | 95                                                                                |                                                                                     |                                                                                     | 54                                                                                  |                                                                                     |                                                                                     | 95                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 288                                                                               |                                                                                   |                                                                                   | 254                                                                               |                                                                                   |                                                                                     | 778                                                                                 |                                                                                     |                                                                                     | 921                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.9                                                                               |                                                                                   |                                                                                   | 6.9                                                                               |                                                                                   |                                                                                     | 11.8                                                                                |                                                                                     |                                                                                     | 14.0                                                                                |                                                                                     |
| Peak Hour Factor           | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.78                                                                              | 0.78                                                                              | 0.78                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 145                                                                               | 10                                                                                | 152                                                                               | 77                                                                                | 26                                                                                | 49                                                                                | 256                                                                                 | 1803                                                                                | 72                                                                                  | 42                                                                                  | 1465                                                                                | 56                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 155                                                                               | 152                                                                               | 0                                                                                 | 103                                                                               | 49                                                                                | 256                                                                                 | 1803                                                                                | 72                                                                                  | 42                                                                                  | 1465                                                                                | 56                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.02                                                                              | 1.02                                                                              | 1.02                                                                              | 1.05                                                                              | 1.05                                                                              | 1.05                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              | 23.0                                                                              | 39.9                                                                              | 39.9                                                                              | 39.9                                                                              | 11.0                                                                                | 28.0                                                                                | 28.0                                                                                | 10.0                                                                                | 36.0                                                                                | 36.0                                                                                |

# Lanier Tract DRI

## 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle

existing p.m.

|                         |  |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 40.0                                                                               | 40.0  | 40.0  | 40.0  | 40.0  | 40.0  | 35.0  | 109.0 | 109.0 | 11.0  | 85.0  | 85.0  |
| Total Split (%)         | 25.0%                                                                              | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 21.9% | 68.1% | 68.1% | 6.9%  | 53.1% | 53.1% |
| Maximum Green (s)       | 34.1                                                                               | 34.1  | 34.1  | 34.1  | 34.1  | 34.1  | 29.0  | 103.0 | 103.0 | 6.0   | 79.0  | 79.0  |
| Yellow Time (s)         | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 4.4   | 4.4   | 3.5   | 4.4   | 4.4   |
| All-Red Time (s)        | 2.9                                                                                | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 3.0   | 1.6   | 1.6   | 1.5   | 1.6   | 1.6   |
| Lost Time Adjust (s)    |                                                                                    | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |                                                                                    | 5.9   | 5.9   |       | 5.9   | 5.9   | 6.0   | 6.0   | 6.0   | 5.0   | 6.0   | 6.0   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           |                                                                                    |       |       | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    |       |       | 30.0  | 30.0  | 30.0  |       | 18.0  | 18.0  |       | 26.0  | 26.0  |
| Pedestrian Calls (#/hr) |                                                                                    |       |       | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    |                                                                                    | 25.7  | 25.7  |       | 25.7  | 25.7  | 122.4 | 113.4 | 113.4 | 101.3 | 94.2  | 94.2  |
| Actuated g/C Ratio      |                                                                                    | 0.16  | 0.16  |       | 0.16  | 0.16  | 0.76  | 0.71  | 0.71  | 0.63  | 0.59  | 0.59  |
| v/c Ratio               |                                                                                    | 0.85  | 0.40  |       | 0.70  | 0.15  | 0.72  | 0.71  | 0.06  | 0.25  | 0.69  | 0.06  |
| Control Delay           |                                                                                    | 100.8 | 10.4  |       | 86.0  | 0.9   | 25.8  | 25.6  | 6.1   | 16.4  | 50.1  | 11.5  |
| Queue Delay             |                                                                                    | 0.0   | 0.4   |       | 3.9   | 0.0   | 0.0   | 7.9   | 0.0   | 0.0   | 0.4   | 0.0   |
| Total Delay             |                                                                                    | 100.8 | 10.8  |       | 90.0  | 0.9   | 25.8  | 33.5  | 6.1   | 16.4  | 50.4  | 11.5  |
| LOS                     |                                                                                    | F     | B     |       | F     | A     | C     | C     | A     | B     | D     | B     |
| Approach Delay          |                                                                                    | 56.2  |       |       | 61.3  |       |       | 31.6  |       |       | 48.1  |       |
| Approach LOS            |                                                                                    | E     |       |       | E     |       |       | C     |       |       | D     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 40.7

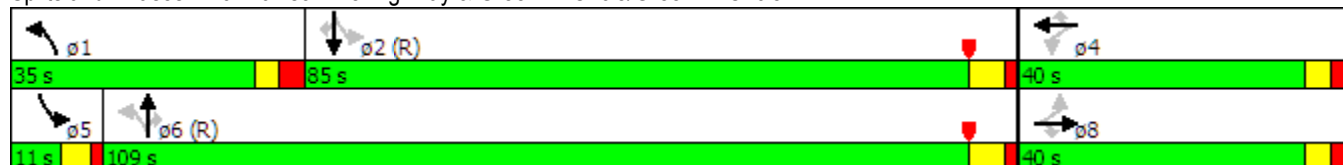
Intersection LOS: D

Intersection Capacity Utilization 81.6%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle





## Lanier Tract DRI

## 10: Dawsonville Highway &amp; Shallowford Rd/Best Buy

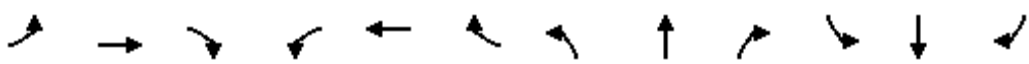
existing p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |                                                                                   |  |  |   |  |  |  |  |  |
| Volume (vph)               | 518                                                                               | 38                                                                                | 26                                                                                | 36                                                                                | 27                                                                                | 7                                                                                 | 40                                                                                  | 1639                                                                                | 114                                                                                 | 7                                                                                   | 1161                                                                                | 463                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | -1%                                                                               |                                                                                   |                                                                                   | 10%                                                                               |                                                                                   |                                                                                     | -4%                                                                                 |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 350                                                                               |                                                                                   | 350                                                                               | 0                                                                                 |                                                                                   | 0                                                                                 | 350                                                                                 |                                                                                     | 150                                                                                 | 265                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 100                                                                               |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             | 0.959                                                                             |                                                                                   |                                                                                   | 0.972                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1723                                                                              | 1740                                                                              | 1623                                                                              | 0                                                                                 | 1754                                                                              | 1534                                                                              | 1841                                                                                | 3682                                                                                | 1647                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             | 0.959                                                                             |                                                                                   |                                                                                   | 0.972                                                                             |                                                                                   | 0.113                                                                               |                                                                                     |                                                                                     | 0.060                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1723                                                                              | 1740                                                                              | 1623                                                                              | 0                                                                                 | 1754                                                                              | 1534                                                                              | 219                                                                                 | 3682                                                                                | 1647                                                                                | 115                                                                                 | 3628                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 106                                                                               |                                                                                   |                                                                                   | 111                                                                               |                                                                                     |                                                                                     | 65                                                                                  |                                                                                     |                                                                                     | 321                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 653                                                                               |                                                                                   |                                                                                   | 178                                                                               |                                                                                   |                                                                                     | 1046                                                                                |                                                                                     |                                                                                     | 778                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 9.9                                                                               |                                                                                   |                                                                                   | 4.9                                                                               |                                                                                   |                                                                                     | 15.8                                                                                |                                                                                     |                                                                                     | 11.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.94                                                                                | 0.94                                                                                | 0.94                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 576                                                                               | 42                                                                                | 29                                                                                | 41                                                                                | 31                                                                                | 8                                                                                 | 43                                                                                  | 1744                                                                                | 121                                                                                 | 8                                                                                   | 1276                                                                                | 509                                                                                 |
| Shared Lane Traffic (%)    | 47%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 305                                                                               | 313                                                                               | 29                                                                                | 0                                                                                 | 72                                                                                | 8                                                                                 | 43                                                                                  | 1744                                                                                | 121                                                                                 | 8                                                                                   | 1276                                                                                | 509                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 0.99                                                                              | 0.99                                                                              | 0.99                                                                              | 1.07                                                                              | 1.07                                                                              | 1.07                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Split                                                                             | NA                                                                                | Perm                                                                              | Split                                                                             | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | Perm                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 3                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 3                                                                                 | 3                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 36.7                                                                              | 36.7                                                                              | 36.7                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                                | 28.8                                                                                | 28.8                                                                                | 30.8                                                                                | 30.8                                                                                | 30.8                                                                                |

# Lanier Tract DRI

## 10: Dawsonville Highway & Shallowford Rd/Best Buy

existing p.m.

|                         |  |       |       |       |       |       |      |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL  | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 37.0                                                                               | 37.0  | 37.0  | 38.9  | 38.9  | 38.9  | 10.8 | 84.1  | 84.1  | 73.3  | 73.3  | 73.3  |
| Total Split (%)         | 23.1%                                                                              | 23.1% | 23.1% | 24.3% | 24.3% | 24.3% | 6.8% | 52.6% | 52.6% | 45.8% | 45.8% | 45.8% |
| Maximum Green (s)       | 30.3                                                                               | 30.3  | 30.3  | 33.0  | 33.0  | 33.0  | 5.0  | 77.3  | 77.3  | 66.5  | 66.5  | 66.5  |
| Yellow Time (s)         | 4.5                                                                                | 4.5   | 4.5   | 3.0   | 3.0   | 3.0   | 3.0  | 4.9   | 4.9   | 4.9   | 4.9   | 4.9   |
| All-Red Time (s)        | 2.2                                                                                | 2.2   | 2.2   | 2.9   | 2.9   | 2.9   | 2.8  | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.7                                                                                | 6.7   | 6.7   |       | 5.9   | 5.9   | 5.8  | 6.8   | 6.8   | 6.8   | 6.8   | 6.8   |
| Lead/Lag                | Lead                                                                               | Lead  | Lead  | Lag   | Lag   | Lag   | Lead |       |       | Lag   | Lag   | Lag   |
| Lead-Lag Optimize?      | Yes                                                                                | Yes   | Yes   | Yes   | Yes   | Yes   | Yes  |       |       | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None | C-Min | C-Min | C-Min | C-Min | C-Min |
| Walk Time (s)           | 4.0                                                                                | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 26.0                                                                               | 26.0  | 26.0  | 29.0  | 29.0  | 29.0  |      | 18.0  | 18.0  | 20.0  | 20.0  | 20.0  |
| Pedestrian Calls (#/hr) | 0                                                                                  | 0     | 0     | 0     | 0     | 0     |      | 0     | 0     | 0     | 0     | 0     |
| Act Effect Green (s)    | 32.0                                                                               | 32.0  | 32.0  |       | 11.9  | 11.9  | 97.7 | 96.7  | 96.7  | 86.2  | 86.2  | 86.2  |
| Actuated g/C Ratio      | 0.20                                                                               | 0.20  | 0.20  |       | 0.07  | 0.07  | 0.61 | 0.60  | 0.60  | 0.54  | 0.54  | 0.54  |
| v/c Ratio               | 0.88                                                                               | 0.90  | 0.07  |       | 0.55  | 0.04  | 0.21 | 0.78  | 0.12  | 0.13  | 0.65  | 0.50  |
| Control Delay           | 88.1                                                                               | 90.1  | 0.3   |       | 86.7  | 0.3   | 15.7 | 27.6  | 7.1   | 51.9  | 55.6  | 32.8  |
| Queue Delay             | 1.0                                                                                | 1.2   | 0.0   |       | 0.0   | 0.0   | 0.0  | 7.4   | 0.0   | 0.0   | 2.0   | 0.4   |
| Total Delay             | 89.1                                                                               | 91.3  | 0.3   |       | 86.7  | 0.3   | 15.7 | 34.9  | 7.1   | 51.9  | 57.6  | 33.2  |
| LOS                     | F                                                                                  | F     | A     |       | F     | A     | B    | C     | A     | D     | E     | C     |
| Approach Delay          |                                                                                    | 86.2  |       |       | 78.0  |       |      | 32.7  |       |       | 50.7  |       |
| Approach LOS            |                                                                                    | F     |       |       | E     |       |      | C     |       |       | D     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 91 (57%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 48.6

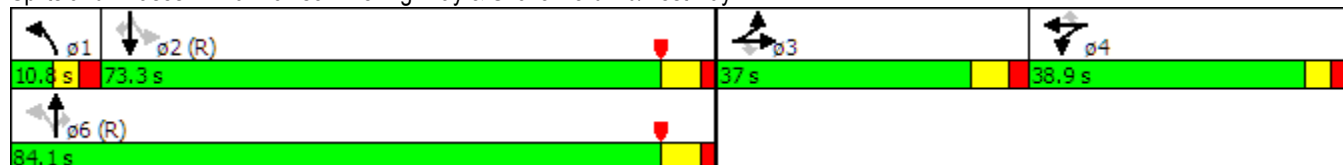
Intersection LOS: D

Intersection Capacity Utilization 81.0%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 10: Dawsonville Highway & Shallowford Rd/Best Buy



## Appendix D

### No-Build Intersection Analysis

Lanier Tract DRI  
1: Sportsman Club Road & Strickland Drive

no build a.m.

Intersection

Int Delay, s/veh 2.6

| Movement                 | WBL  | WBR  | NBT  | NBR  | SBL  | SBT  |
|--------------------------|------|------|------|------|------|------|
| Vol, veh/h               | 11   | 0    | 7    | 1    | 0    | 25   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | 0    | -    | -    | 0    |
| Grade, %                 | 0    | -    | 0    | -    | -    | 0    |
| Peak Hour Factor         | 50   | 50   | 58   | 58   | 64   | 64   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 22   | 0    | 12   | 2    | 0    | 39   |

| Major/Minor          | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 52     | 13     | 0      |
| Stage 1              | 13     | -      | -      |
| Stage 2              | 39     | -      | -      |
| Critical Hdwy        | 6.42   | 6.22   | 4.12   |
| Critical Hdwy Stg 1  | 5.42   | -      | -      |
| Critical Hdwy Stg 2  | 5.42   | -      | -      |
| Follow-up Hdwy       | 3.518  | 3.318  | 2.218  |
| Pot Cap-1 Maneuver   | 957    | 1067   | 1604   |
| Stage 1              | 1010   | -      | -      |
| Stage 2              | 983    | -      | -      |
| Platoon blocked, %   | -      | -      | -      |
| Mov Cap-1 Maneuver   | 957    | 1067   | 1604   |
| Mov Cap-2 Maneuver   | 957    | -      | -      |
| Stage 1              | 1010   | -      | -      |
| Stage 2              | 983    | -      | -      |

| Approach             | WB  | NB | SB |
|----------------------|-----|----|----|
| HCM Control Delay, s | 8.9 | 0  | 0  |
| HCM LOS              | A   |    |    |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL  | SBT |
|-----------------------|-----|----------|------|-----|
| Capacity (veh/h)      | -   | - 957    | 1604 | -   |
| HCM Lane V/C Ratio    | -   | - 0.023  | -    | -   |
| HCM Control Delay (s) | -   | - 8.9    | 0    | -   |
| HCM Lane LOS          | -   | - A      | A    | -   |
| HCM 95th %tile Q(veh) | -   | - 0.1    | 0    | -   |

Lanier Tract DRI  
2: GA 53 & Sportsman Club Road

no build a.m.

| Intersection               |        |                        |      |                            |      |      |                                |          |      |          |      |      |
|----------------------------|--------|------------------------|------|----------------------------|------|------|--------------------------------|----------|------|----------|------|------|
| Int Delay, s/veh           | 11.8   |                        |      |                            |      |      |                                |          |      |          |      |      |
|                            |        |                        |      |                            |      |      |                                |          |      |          |      |      |
| Movement                   | EBL    | EBT                    | EBR  | WBL                        | WBT  | WBR  | NBL                            | NBT      | NBR  | SBL      | SBT  | SBR  |
| Vol, veh/h                 | 10     | 1863                   | 0    | 0                          | 820  | 9    | 0                              | 0        | 0    | 28       | 0    | 17   |
| Conflicting Peds, #/hr     | 0      | 0                      | 0    | 0                          | 0    | 0    | 0                              | 0        | 0    | 0        | 0    | 0    |
| Sign Control               | Free   | Free                   | Free | Free                       | Free | Free | Stop                           | Stop     | Stop | Stop     | Stop | Stop |
| RT Channelized             | -      | -                      | None | -                          | -    | None | -                              | -        | None | -        | -    | None |
| Storage Length             | 0      | -                      | -    | 0                          | -    | -    | -                              | -        | -    | -        | -    | -    |
| Veh in Median Storage, #   | -      | 0                      | -    | -                          | 0    | -    | -                              | 0        | -    | -        | 0    | -    |
| Grade, %                   | -      | 0                      | -    | -                          | 0    | -    | -                              | 0        | -    | -        | 0    | -    |
| Peak Hour Factor           | 86     | 86                     | 86   | 84                         | 84   | 84   | 92                             | 92       | 92   | 59       | 59   | 59   |
| Heavy Vehicles, %          | 2      | 2                      | 2    | 2                          | 2    | 2    | 2                              | 2        | 2    | 2        | 2    | 2    |
| Mvmt Flow                  | 12     | 2166                   | 0    | 0                          | 976  | 11   | 0                              | 0        | 0    | 47       | 0    | 29   |
|                            |        |                        |      |                            |      |      |                                |          |      |          |      |      |
| Major/Minor                | Major1 |                        |      | Major2                     |      |      | Minor1                         |          |      | Minor2   |      |      |
| Conflicting Flow All       | 987    | 0                      | 0    | 2166                       | 0    | 0    | 2678                           | 3177     | 1083 | 2088     | 3172 | 493  |
| Stage 1                    | -      | -                      | -    | -                          | -    | -    | 2190                           | 2190     | -    | 982      | 982  | -    |
| Stage 2                    | -      | -                      | -    | -                          | -    | -    | 488                            | 987      | -    | 1106     | 2190 | -    |
| Critical Hdwy              | 4.14   | -                      | -    | 4.14                       | -    | -    | 7.54                           | 6.54     | 6.94 | 7.54     | 6.54 | 6.94 |
| Critical Hdwy Stg 1        | -      | -                      | -    | -                          | -    | -    | 6.54                           | 5.54     | -    | 6.54     | 5.54 | -    |
| Critical Hdwy Stg 2        | -      | -                      | -    | -                          | -    | -    | 6.54                           | 5.54     | -    | 6.54     | 5.54 | -    |
| Follow-up Hdwy             | 2.22   | -                      | -    | 2.22                       | -    | -    | 3.52                           | 4.02     | 3.32 | 3.52     | 4.02 | 3.32 |
| Pot Cap-1 Maneuver         | 696    | -                      | -    | 243                        | -    | -    | 11                             | 10       | 213  | ~ 30     | 10   | 522  |
| Stage 1                    | -      | -                      | -    | -                          | -    | -    | 46                             | 82       | -    | 267      | 325  | -    |
| Stage 2                    | -      | -                      | -    | -                          | -    | -    | 530                            | 324      | -    | 224      | 82   | -    |
| Platoon blocked, %         |        | -                      | -    |                            | -    | -    |                                |          |      |          |      |      |
| Mov Cap-1 Maneuver         | 696    | -                      | -    | 243                        | -    | -    | 10                             | 10       | 213  | ~ 30     | 10   | 522  |
| Mov Cap-2 Maneuver         | -      | -                      | -    | -                          | -    | -    | 10                             | 10       | -    | ~ 30     | 10   | -    |
| Stage 1                    | -      | -                      | -    | -                          | -    | -    | 45                             | 81       | -    | 262      | 325  | -    |
| Stage 2                    | -      | -                      | -    | -                          | -    | -    | 501                            | 324      | -    | 220      | 81   | -    |
|                            |        |                        |      |                            |      |      |                                |          |      |          |      |      |
| Approach                   | EB     |                        |      | WB                         |      |      | NB                             |          |      | SB       |      |      |
| HCM Control Delay, s       | 0.1    |                        |      | 0                          |      |      | 0                              |          |      | \$ 496.6 |      |      |
| HCM LOS                    |        |                        |      |                            |      |      | A                              |          |      | F        |      |      |
|                            |        |                        |      |                            |      |      |                                |          |      |          |      |      |
| Minor Lane/Major Mvmt      | NBLn1  | EBL                    | EBT  | EBR                        | WBL  | WBT  | WBR                            | SBLn1    |      |          |      |      |
| Capacity (veh/h)           | -      | 696                    | -    | -                          | 243  | -    | -                              | 47       |      |          |      |      |
| HCM Lane V/C Ratio         | -      | 0.017                  | -    | -                          | -    | -    | -                              | 1.623    |      |          |      |      |
| HCM Control Delay (s)      | 0      | 10.3                   | -    | -                          | 0    | -    | -                              | \$ 496.6 |      |          |      |      |
| HCM Lane LOS               | A      | B                      | -    | -                          | A    | -    | -                              | F        |      |          |      |      |
| HCM 95th %tile Q(veh)      | -      | 0.1                    | -    | -                          | 0    | -    | -                              | 7.5      |      |          |      |      |
| Notes                      |        |                        |      |                            |      |      |                                |          |      |          |      |      |
| ~: Volume exceeds capacity |        | \$: Delay exceeds 300s |      | +: Computation Not Defined |      |      | *: All major volume in platoon |          |      |          |      |      |

Lanier Tract DRI  
3: GA 53 & Avonlea Way

no build a.m.

| Intersection                                                                                                         |        |        |       |        |      |      |
|----------------------------------------------------------------------------------------------------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh                                                                                                     | 4.5    |        |       |        |      |      |
| Movement                                                                                                             | EBL    | EBR    | NBL   | NBT    | SBT  | SBR  |
| Vol, veh/h                                                                                                           | 17     | 79     | 13    | 836    | 1842 | 7    |
| Conflicting Peds, #/hr                                                                                               | 0      | 0      | 0     | 0      | 0    | 0    |
| Sign Control                                                                                                         | Stop   | Stop   | Free  | Free   | Free | Free |
| RT Channelized                                                                                                       | -      | None   | -     | None   | -    | None |
| Storage Length                                                                                                       | 0      | 0      | 0     | -      | -    | 0    |
| Veh in Median Storage, #                                                                                             | 0      | -      | -     | 0      | 0    | -    |
| Grade, %                                                                                                             | 0      | -      | -     | 0      | 0    | -    |
| Peak Hour Factor                                                                                                     | 84     | 84     | 88    | 88     | 86   | 86   |
| Heavy Vehicles, %                                                                                                    | 2      | 2      | 2     | 2      | 2    | 2    |
| Mvmt Flow                                                                                                            | 20     | 94     | 15    | 950    | 2142 | 8    |
| Major/Minor                                                                                                          | Minor2 | Major1 |       | Major2 |      |      |
| Conflicting Flow All                                                                                                 | 2647   | 1071   | 2142  | 0      | -    | 0    |
| Stage 1                                                                                                              | 2142   | -      | -     | -      | -    | -    |
| Stage 2                                                                                                              | 505    | -      | -     | -      | -    | -    |
| Critical Hdwy                                                                                                        | 6.84   | 6.94   | 4.14  | -      | -    | -    |
| Critical Hdwy Stg 1                                                                                                  | 5.84   | -      | -     | -      | -    | -    |
| Critical Hdwy Stg 2                                                                                                  | 5.84   | -      | -     | -      | -    | -    |
| Follow-up Hdwy                                                                                                       | 3.52   | 3.32   | 2.22  | -      | -    | -    |
| Pot Cap-1 Maneuver                                                                                                   | ~ 19   | 217    | 249   | -      | -    | -    |
| Stage 1                                                                                                              | 76     | -      | -     | -      | -    | -    |
| Stage 2                                                                                                              | 571    | -      | -     | -      | -    | -    |
| Platoon blocked, %                                                                                                   |        |        |       | -      | -    | -    |
| Mov Cap-1 Maneuver                                                                                                   | ~ 18   | 217    | 249   | -      | -    | -    |
| Mov Cap-2 Maneuver                                                                                                   | ~ 18   | -      | -     | -      | -    | -    |
| Stage 1                                                                                                              | 76     | -      | -     | -      | -    | -    |
| Stage 2                                                                                                              | 537    | -      | -     | -      | -    | -    |
| Approach                                                                                                             | EB     | NB     |       | SB     |      |      |
| HCM Control Delay, s                                                                                                 | 125.5  | 0.3    |       | 0      |      |      |
| HCM LOS                                                                                                              | F      |        |       |        |      |      |
| Minor Lane/Major Mvmt                                                                                                | NBL    | NBT    | EBLn1 | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)                                                                                                     | 249    | -      | 18    | 217    | -    | -    |
| HCM Lane V/C Ratio                                                                                                   | 0.059  | -      | 1.124 | 0.433  | -    | -    |
| HCM Control Delay (s)                                                                                                | 20.4   | -      | 552.3 | 33.7   | -    | -    |
| HCM Lane LOS                                                                                                         | C      | -      | F     | D      | -    | -    |
| HCM 95th %tile Q(veh)                                                                                                | 0.2    | -      | 2.9   | 2      | -    | -    |
| Notes                                                                                                                |        |        |       |        |      |      |
| ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |        |        |       |        |      |      |

Lanier Tract DRI  
4: GA 53 & Canterbury Road

no build a.m.

Intersection

Int Delay, s/veh 6.7

| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
|--------------------------|------|------|------|------|------|------|
| Vol, veh/h               | 20   | 105  | 25   | 797  | 1969 | 8    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | 0    | 0    | -    | -    | 0    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 88   | 88   | 86   | 86   | 91   | 91   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 23   | 119  | 29   | 927  | 2164 | 9    |

| Major/Minor          | Minor2 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 2686   | 1082   | 2164 0 |
| Stage 1              | 2164   | -      | - -    |
| Stage 2              | 522    | -      | - -    |
| Critical Hdwy        | 6.84   | 6.94   | 4.14 - |
| Critical Hdwy Stg 1  | 5.84   | -      | - -    |
| Critical Hdwy Stg 2  | 5.84   | -      | - -    |
| Follow-up Hdwy       | 3.52   | 3.32   | 2.22 - |
| Pot Cap-1 Maneuver   | ~ 18   | 213    | 244 -  |
| Stage 1              | 74     | -      | - -    |
| Stage 2              | 560    | -      | - -    |
| Platoon blocked, %   |        |        | - -    |
| Mov Cap-1 Maneuver   | ~ 16   | 213    | 244 -  |
| Mov Cap-2 Maneuver   | ~ 16   | -      | - -    |
| Stage 1              | 74     | -      | - -    |
| Stage 2              | 493    | -      | - -    |

| Approach             | EB    | NB  | SB |
|----------------------|-------|-----|----|
| HCM Control Delay, s | 149.3 | 0.7 | 0  |
| HCM LOS              | F     |     |    |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | EBLn2 | SBT | SBR |
|-----------------------|-------|-----|-------|-------|-----|-----|
| Capacity (veh/h)      | 244   | -   | 16    | 213   | -   | -   |
| HCM Lane V/C Ratio    | 0.119 | -   | 1.42  | 0.56  | -   | -   |
| HCM Control Delay (s) | 21.7  | \$  | 715.5 | 41.5  | -   | -   |
| HCM Lane LOS          | C     | -   | F     | E     | -   | -   |
| HCM 95th %tile Q(veh) | 0.4   | -   | 3.4   | 3     | -   | -   |

Notes

~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

| Intersection             |        |        |          |        |      |      |
|--------------------------|--------|--------|----------|--------|------|------|
| Int Delay, s/veh         | 2.6    |        |          |        |      |      |
| Movement                 | EBL    | EBR    | NBL      | NBT    | SBT  | SBR  |
| Vol, veh/h               | 6      | 45     | 30       | 869    | 2215 | 2    |
| Conflicting Peds, #/hr   | 0      | 0      | 0        | 0      | 0    | 0    |
| Sign Control             | Stop   | Stop   | Free     | Free   | Free | Free |
| RT Channelized           | -      | Yield  | -        | Yield  | -    | None |
| Storage Length           | 0      | 0      | 200      | -      | -    | 360  |
| Veh in Median Storage, # | 0      | -      | -        | 0      | 0    | -    |
| Grade, %                 | 0      | -      | -        | 1      | 0    | -    |
| Peak Hour Factor         | 82     | 82     | 87       | 87     | 89   | 89   |
| Heavy Vehicles, %        | 0      | 0      | 0        | 1      | 0    | 0    |
| Mvmt Flow                | 7      | 55     | 34       | 999    | 2489 | 2    |
| Major/Minor              | Minor2 | Major1 |          | Major2 |      |      |
| Conflicting Flow All     | 3057   | 1244   | 2489     | 0      | -    | 0    |
| Stage 1                  | 2489   | -      | -        | -      | -    | -    |
| Stage 2                  | 568    | -      | -        | -      | -    | -    |
| Critical Hdwy            | 6.8    | 6.9    | 4.1      | -      | -    | -    |
| Critical Hdwy Stg 1      | 5.8    | -      | -        | -      | -    | -    |
| Critical Hdwy Stg 2      | 5.8    | -      | -        | -      | -    | -    |
| Follow-up Hdwy           | 3.5    | 3.3    | 2.2      | -      | -    | -    |
| Pot Cap-1 Maneuver       | 10     | 169    | 187      | -      | -    | -    |
| Stage 1                  | 50     | -      | -        | -      | -    | -    |
| Stage 2                  | 536    | -      | -        | -      | -    | -    |
| Platoon blocked, %       |        |        |          | -      | -    | -    |
| Mov Cap-1 Maneuver       | 8      | 169    | 187      | -      | -    | -    |
| Mov Cap-2 Maneuver       | 8      | -      | -        | -      | -    | -    |
| Stage 1                  | 50     | -      | -        | -      | -    | -    |
| Stage 2                  | 439    | -      | -        | -      | -    | -    |
| Approach                 | EB     | NB     |          | SB     |      |      |
| HCM Control Delay, s     | 133.9  | 1      |          | 0      |      |      |
| HCM LOS                  | F      |        |          |        |      |      |
| Minor Lane/Major Mvmt    | NBL    | NBT    | EBLn1    | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)         | 187    | -      | 8        | 169    | -    | -    |
| HCM Lane V/C Ratio       | 0.184  | -      | 0.915    | 0.325  | -    | -    |
| HCM Control Delay (s)    | 28.6   | -      | \$ 866.6 | 36.2   | -    | -    |
| HCM Lane LOS             | D      | -      | F        | E      | -    | -    |
| HCM 95th %tile Q(veh)    | 0.7    | -      | 1.6      | 1.3    | -    | -    |



# Lanier Tract DRI

## 5: GA 53 & Lanier Valley Dr/Ahaluna Dr

no build a.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Volume (vph)               | 21                                                                                | 6                                                                                 | 127                                                                               | 41                                                                                | 3                                                                                 | 22                                                                                | 61                                                                                  | 774                                                                                 | 12                                                                                  | 15                                                                                  | 2099                                                                                | 0                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 2%                                                                                |                                                                                   |                                                                                   | -4%                                                                               |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 100                                                                                 |                                                                                     | 0                                                                                   | 140                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.889                                                                             |                                                                                   |                                                                                   | 0.954                                                                             |                                                                                   |                                                                                     | 0.998                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   | 0.993                                                                             |                                                                                   |                                                                                   | 0.970                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1661                                                                              | 0                                                                                 | 0                                                                                 | 1793                                                                              | 0                                                                                 | 1796                                                                                | 3516                                                                                | 0                                                                                   | 1814                                                                                | 3628                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.940                                                                             |                                                                                   |                                                                                   | 0.380                                                                             |                                                                                   | 0.035                                                                               |                                                                                     |                                                                                     | 0.309                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1572                                                                              | 0                                                                                 | 0                                                                                 | 703                                                                               | 0                                                                                 | 66                                                                                  | 3516                                                                                | 0                                                                                   | 590                                                                                 | 3628                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 71                                                                                |                                                                                   |                                                                                   | 14                                                                                |                                                                                   |                                                                                     | 4                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 340                                                                               |                                                                                   |                                                                                   | 322                                                                               |                                                                                   |                                                                                     | 888                                                                                 |                                                                                     |                                                                                     | 1417                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.7                                                                               |                                                                                   |                                                                                   | 7.3                                                                               |                                                                                   |                                                                                     | 13.5                                                                                |                                                                                     |                                                                                     | 21.5                                                                                |                                                                                     |
| Peak Hour Factor           | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.83                                                                              | 0.83                                                                              | 0.83                                                                              | 0.85                                                                                | 0.85                                                                                | 0.85                                                                                | 0.87                                                                                | 0.87                                                                                | 0.87                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 23                                                                                | 7                                                                                 | 140                                                                               | 49                                                                                | 4                                                                                 | 27                                                                                | 72                                                                                  | 911                                                                                 | 14                                                                                  | 17                                                                                  | 2413                                                                                | 0                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 170                                                                               | 0                                                                                 | 0                                                                                 | 80                                                                                | 0                                                                                 | 72                                                                                  | 925                                                                                 | 0                                                                                   | 17                                                                                  | 2413                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 |                                                                                     | 0                                                                                   | 336                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   |                                                                                     | 0                                                                                   | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 8                                                                                 | 8                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 10.6                                                                                | 23.0                                                                                |                                                                                     | 23.0                                                                                | 23.0                                                                                |                                                                                     |

# Lanier Tract DRI

## 5: GA 53 & Lanier Valley Dr/Ahaluna Dr

no build a.m.

|                       |  |       |     |       |       |     |       |       |     |       |       |     |
|-----------------------|------------------------------------------------------------------------------------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Lane Group            | EBL                                                                                | EBT   | EBR | WBL   | WBT   | WBR | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
| Total Split (s)       | 24.0                                                                               | 24.0  |     | 24.0  | 24.0  |     | 12.0  | 126.0 |     | 114.0 | 114.0 |     |
| Total Split (%)       | 16.0%                                                                              | 16.0% |     | 16.0% | 16.0% |     | 8.0%  | 84.0% |     | 76.0% | 76.0% |     |
| Maximum Green (s)     | 17.4                                                                               | 17.4  |     | 17.4  | 17.4  |     | 6.4   | 119.9 |     | 107.9 | 107.9 |     |
| Yellow Time (s)       | 4.0                                                                                | 4.0   |     | 4.0   | 4.0   |     | 3.0   | 4.5   |     | 4.5   | 4.5   |     |
| All-Red Time (s)      | 2.6                                                                                | 2.6   |     | 2.6   | 2.6   |     | 2.6   | 1.6   |     | 1.6   | 1.6   |     |
| Lost Time Adjust (s)  |                                                                                    | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Lost Time (s)   |                                                                                    | 6.6   |     |       | 6.6   |     | 5.6   | 6.1   |     | 6.1   | 6.1   |     |
| Lead/Lag              |                                                                                    |       |     |       |       |     | Lead  |       |     | Lag   | Lag   |     |
| Lead-Lag Optimize?    |                                                                                    |       |     |       |       |     | Yes   |       |     | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0                                                                                | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode           | None                                                                               | None  |     | None  | None  |     | None  | C-Max |     | C-Max | C-Max |     |
| Act Effect Green (s)  |                                                                                    | 15.4  |     |       | 15.4  |     | 122.4 | 121.9 |     | 110.1 | 110.1 |     |
| Actuated g/C Ratio    |                                                                                    | 0.10  |     |       | 0.10  |     | 0.82  | 0.81  |     | 0.73  | 0.73  |     |
| v/c Ratio             |                                                                                    | 0.76  |     |       | 0.95  |     | 0.58  | 0.32  |     | 0.04  | 0.91  |     |
| Control Delay         |                                                                                    | 58.3  |     |       | 139.1 |     | 52.0  | 2.0   |     | 6.3   | 22.8  |     |
| Queue Delay           |                                                                                    | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay           |                                                                                    | 58.3  |     |       | 139.1 |     | 52.0  | 2.0   |     | 6.3   | 22.8  |     |
| LOS                   |                                                                                    | E     |     |       | F     |     | D     | A     |     | A     | C     |     |
| Approach Delay        |                                                                                    | 58.3  |     |       | 139.1 |     |       | 5.6   |     |       | 22.7  |     |
| Approach LOS          |                                                                                    | E     |     |       | F     |     |       | A     |     |       | C     |     |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 26 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 22.3

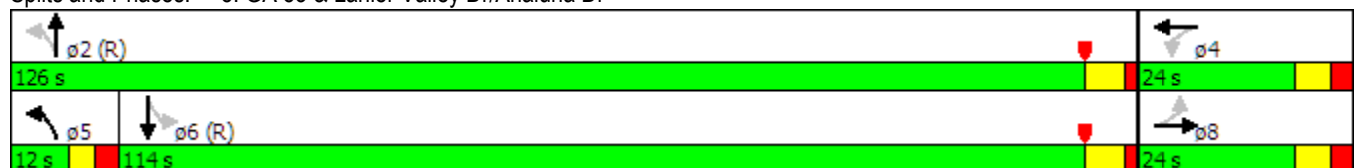
Intersection LOS: C

Intersection Capacity Utilization 80.9%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 5: GA 53 & Lanier Valley Dr/Ahaluna Dr



## Lanier Tract DRI

## 6: 53-Dawsonville Hwy &amp; Academy Sports

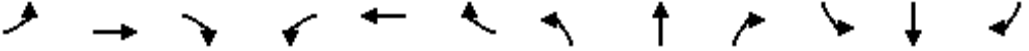
no build a.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |  |  |  |  |  |  |  |
| Volume (vph)               | 2                                                                                 | 0                                                                                 | 7                                                                                 | 2                                                                                 | 0                                                                                 | 0                                                                                 | 12                                                                                  | 817                                                                                 | 10                                                                                  | 6                                                                                   | 2196                                                                                | 4                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 4%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 70                                                                                | 200                                                                                 |                                                                                     | 170                                                                                 | 190                                                                                 |                                                                                     | 360                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1805                                                                              | 1900                                                                              | 1615                                                                              | 1769                                                                              | 1862                                                                              | 1862                                                                              | 1796                                                                                | 3556                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 0.037                                                                               |                                                                                     |                                                                                     | 0.299                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1900                                                                              | 1900                                                                              | 1615                                                                              | 1862                                                                              | 1862                                                                              | 1862                                                                              | 70                                                                                  | 3556                                                                                | 1607                                                                                | 568                                                                                 | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 67                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 68                                                                                  |                                                                                     |                                                                                     | 68                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 262                                                                               |                                                                                   |                                                                                   | 246                                                                               |                                                                                   |                                                                                     | 1836                                                                                |                                                                                     |                                                                                     | 685                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.1                                                                               |                                                                                   |                                                                                   | 6.7                                                                               |                                                                                   |                                                                                     | 27.8                                                                                |                                                                                     |                                                                                     | 10.4                                                                                |                                                                                     |
| Peak Hour Factor           | 0.67                                                                              | 0.67                                                                              | 0.67                                                                              | 0.50                                                                              | 0.50                                                                              | 0.50                                                                              | 0.86                                                                                | 0.86                                                                                | 0.86                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 3                                                                                 | 0                                                                                 | 10                                                                                | 4                                                                                 | 0                                                                                 | 0                                                                                 | 14                                                                                  | 950                                                                                 | 12                                                                                  | 7                                                                                   | 2440                                                                                | 4                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 3                                                                                 | 0                                                                                 | 10                                                                                | 4                                                                                 | 0                                                                                 | 0                                                                                 | 14                                                                                  | 950                                                                                 | 12                                                                                  | 7                                                                                   | 2440                                                                                | 4                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              |                                                                                   | Perm                                                                              | Perm                                                                              |                                                                                   | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 2                                                                                   |                                                                                     | 2                                                                                   | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 42.0                                                                              | 42.0                                                                              | 42.0                                                                              | 42.4                                                                              | 42.4                                                                              | 42.4                                                                              | 11.4                                                                                | 30.3                                                                                | 30.3                                                                                | 11.0                                                                                | 29.3                                                                                | 29.3                                                                                |

# Lanier Tract DRI

## 6: 53-Dawsonville Hwy & Academy Sports

no build a.m.

|                         |  |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 42.4                                                                               | 42.4  | 42.4  | 42.4  | 42.4  | 42.4  | 11.4  | 96.6  | 96.6  | 11.0  | 96.2  | 96.2  |
| Total Split (%)         | 28.3%                                                                              | 28.3% | 28.3% | 28.3% | 28.3% | 28.3% | 7.6%  | 64.4% | 64.4% | 7.3%  | 64.1% | 64.1% |
| Maximum Green (s)       | 36.0                                                                               | 36.0  | 36.0  | 36.0  | 36.0  | 36.0  | 5.0   | 90.4  | 90.4  | 5.0   | 90.0  | 90.0  |
| Yellow Time (s)         | 3.4                                                                                | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 4.3   | 4.3   | 3.0   | 4.3   | 4.3   |
| All-Red Time (s)        | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 1.9   | 1.9   | 3.0   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.4                                                                                | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.2   | 6.2   | 6.0   | 6.2   | 6.2   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           | 4.0                                                                                | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 23.0                                                                               | 23.0  | 23.0  | 32.0  | 32.0  | 32.0  |       | 20.0  | 20.0  |       | 19.0  | 19.0  |
| Pedestrian Calls (#/hr) | 0                                                                                  | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    | 6.1                                                                                |       | 6.1   | 6.1   |       |       | 137.2 | 139.9 | 139.9 | 136.1 | 137.4 | 137.4 |
| Actuated g/C Ratio      | 0.04                                                                               |       | 0.04  | 0.04  |       |       | 0.91  | 0.93  | 0.93  | 0.91  | 0.92  | 0.92  |
| v/c Ratio               | 0.04                                                                               |       | 0.08  | 0.05  |       |       | 0.11  | 0.29  | 0.01  | 0.01  | 0.74  | 0.00  |
| Control Delay           | 69.5                                                                               |       | 1.1   | 70.0  |       |       | 4.4   | 0.9   | 0.0   | 0.8   | 3.9   | 0.0   |
| Queue Delay             | 0.0                                                                                |       | 0.0   | 0.0   |       |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay             | 69.5                                                                               |       | 1.1   | 70.0  |       |       | 4.4   | 0.9   | 0.0   | 0.8   | 3.9   | 0.0   |
| LOS                     | E                                                                                  |       | A     | E     |       |       | A     | A     | A     | A     | A     | A     |
| Approach Delay          |                                                                                    |       |       |       |       |       |       | 1.0   |       |       | 3.9   |       |
| Approach LOS            |                                                                                    |       |       |       |       |       |       | A     |       |       | A     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 27 (18%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 145

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 3.2

Intersection LOS: A

Intersection Capacity Utilization 84.9%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 6: 53-Dawsonville Hwy & Academy Sports

|                                                                                        |                                                                                            |  |                                                                                          |
|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------|
|  p1 |  p2 (R) |  |  p4 |
| 11 s                                                                                   | 96.6 s                                                                                     |  | 42.4 s                                                                                   |
|  p5 |  p6 (R) |  |  p8 |
| 11.4 s                                                                                 | 96.2 s                                                                                     |  | 42.4 s                                                                                   |

## Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 &amp; McEver Road/McEver

no build a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |                                                                                   |   |  |  |  |  |  |
| Volume (vph)               | 431                                                                               | 31                                                                                | 378                                                                               | 46                                                                                | 21                                                                                | 20                                                                                | 311                                                                                 | 513                                                                                 | 61                                                                                  | 31                                                                                  | 1292                                                                                | 914                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 1%                                                                                |                                                                                   |                                                                                   | 5%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 180                                                                               |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 310                                                                                 |                                                                                     | 185                                                                                 | 255                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 50                                                                                |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.872                                                                             | 0.850                                                                             |                                                                                   | 0.927                                                                             |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 3484                                                                              | 1566                                                                              | 1527                                                                              | 1760                                                                              | 1717                                                                              | 0                                                                                 | 3484                                                                                | 3487                                                                                | 1575                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   | 0.598                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 3484                                                                              | 1566                                                                              | 1527                                                                              | 1108                                                                              | 1717                                                                              | 0                                                                                 | 3484                                                                                | 3487                                                                                | 1575                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 183                                                                               | 207                                                                               |                                                                                   | 31                                                                                |                                                                                   |                                                                                     |                                                                                     | 184                                                                                 |                                                                                     |                                                                                     | 544                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 45                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 580                                                                               |                                                                                   |                                                                                   | 331                                                                               |                                                                                   |                                                                                     | 921                                                                                 |                                                                                     |                                                                                     | 1624                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 8.8                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                     | 14.0                                                                                |                                                                                     |                                                                                     | 24.6                                                                                |                                                                                     |
| Peak Hour Factor           | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.62                                                                              | 0.62                                                                              | 0.62                                                                              | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 3%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 444                                                                               | 32                                                                                | 390                                                                               | 74                                                                                | 34                                                                                | 32                                                                                | 334                                                                                 | 552                                                                                 | 66                                                                                  | 34                                                                                  | 1436                                                                                | 1016                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   | 47%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 444                                                                               | 215                                                                               | 207                                                                               | 74                                                                                | 66                                                                                | 0                                                                                 | 334                                                                                 | 552                                                                                 | 66                                                                                  | 34                                                                                  | 1436                                                                                | 1016                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 24                                                                                |                                                                                   |                                                                                   | 24                                                                                |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                             | NA                                                                                |                                                                                   | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 8                                                                                 |                                                                                   | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 8                                                                                 | 8                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 13.2                                                                              | 50.2                                                                              | 50.2                                                                              | 11.6                                                                              | 48.2                                                                              |                                                                                   | 13.4                                                                                | 35.6                                                                                | 35.6                                                                                | 12.9                                                                                | 44.6                                                                                | 44.6                                                                                |

# Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 & McEver Road/McEver

no build a.m.

|                         |  |       |       |      |       |     |       |       |       |      |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|------|-------|-----|-------|-------|-------|------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL  | WBT   | WBR | NBL   | NBT   | NBR   | SBL  | SBT   | SBR   |
| Total Split (s)         | 23.0                                                                               | 59.1  | 59.1  | 12.1 | 48.2  |     | 20.0  | 64.6  | 64.6  | 14.2 | 58.8  | 58.8  |
| Total Split (%)         | 15.3%                                                                              | 39.4% | 39.4% | 8.1% | 32.1% |     | 13.3% | 43.1% | 43.1% | 9.5% | 39.2% | 39.2% |
| Maximum Green (s)       | 15.7                                                                               | 51.8  | 51.8  | 5.6  | 40.9  |     | 12.5  | 58.0  | 58.0  | 7.0  | 52.2  | 52.2  |
| Yellow Time (s)         | 4.3                                                                                | 4.3   | 4.3   | 3.5  | 4.3   |     | 4.5   | 4.4   | 4.4   | 4.2  | 4.4   | 4.4   |
| All-Red Time (s)        | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 2.2   | 2.2   | 3.0  | 2.2   | 2.2   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Lost Time (s)     | 7.3                                                                                | 7.3   | 7.3   | 6.5  | 7.3   |     | 7.5   | 6.6   | 6.6   | 7.2  | 6.6   | 6.6   |
| Lead/Lag                | Lead                                                                               | Lag   | Lag   | Lead | Lag   |     | Lag   | Lag   | Lag   | Lead | Lead  | Lead  |
| Lead-Lag Optimize?      | Yes                                                                                | Yes   | Yes   | Yes  | Yes   |     | Yes   | Yes   | Yes   | Yes  | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None | None  |     | None  | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s)           |                                                                                    | 4.0   | 4.0   |      | 4.0   |     |       | 4.0   | 4.0   |      | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    | 38.0  | 38.0  |      | 36.0  |     |       | 25.0  | 25.0  |      | 34.0  | 34.0  |
| Pedestrian Calls (#/hr) |                                                                                    | 0     | 0     |      | 0     |     |       | 0     | 0     |      | 0     | 0     |
| Act Effect Green (s)    | 16.1                                                                               | 17.5  | 17.5  | 14.0 | 8.8   |     | 12.5  | 93.5  | 93.5  | 8.3  | 86.5  | 86.5  |
| Actuated g/C Ratio      | 0.11                                                                               | 0.12  | 0.12  | 0.09 | 0.06  |     | 0.08  | 0.62  | 0.62  | 0.06 | 0.58  | 0.58  |
| v/c Ratio               | 1.19                                                                               | 0.62  | 0.57  | 0.58 | 0.51  |     | 1.15  | 0.25  | 0.06  | 0.34 | 0.69  | 0.87  |
| Control Delay           | 164.3                                                                              | 20.5  | 13.5  | 70.3 | 52.3  |     | 163.5 | 17.6  | 1.5   | 81.4 | 21.9  | 15.3  |
| Queue Delay             | 0.0                                                                                | 0.0   | 0.0   | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Delay             | 164.3                                                                              | 20.5  | 13.5  | 70.3 | 52.3  |     | 163.5 | 17.6  | 1.5   | 81.4 | 21.9  | 15.3  |
| LOS                     | F                                                                                  | C     | B     | E    | D     |     | F     | B     | A     | F    | C     | B     |
| Approach Delay          |                                                                                    | 92.6  |       |      | 61.8  |     |       | 67.7  |       |      | 20.0  |       |
| Approach LOS            |                                                                                    | F     |       |      | E     |     |       | E     |       |      | C     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 19 (13%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.19

Intersection Signal Delay: 45.7

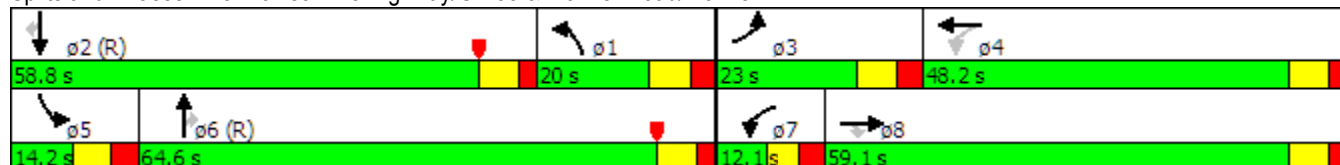
Intersection LOS: D

Intersection Capacity Utilization 87.5%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 8: Dawsonville Highway/GA 53 & McEver Road/McEver



## Lanier Tract DRI

## 9: Dawsonville Highway &amp; Greenhill Circle/Greenhill Circle

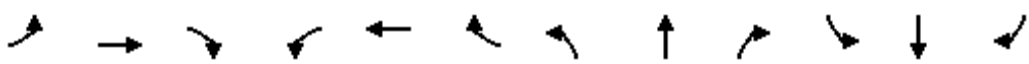
no build a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 74                                                                                | 1                                                                                 | 156                                                                               | 7                                                                                 | 1                                                                                 | 4                                                                                 | 149                                                                                 | 832                                                                                 | 11                                                                                  | 13                                                                                  | 1550                                                                                | 57                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 3%                                                                                |                                                                                   |                                                                                   | 7%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 190                                                                                 |                                                                                     | 190                                                                                 | 185                                                                                 |                                                                                     | 100                                                                                 |
| Storage Lanes              | 0                                                                                 |                                                                                   | 1                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              |                                                                                   | 0.953                                                                             |                                                                                   |                                                                                   | 0.957                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1784                                                                              | 1591                                                                              | 0                                                                                 | 1755                                                                              | 1558                                                                              | 1796                                                                                | 3522                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   | 0.721                                                                             |                                                                                   |                                                                                   | 0.751                                                                             |                                                                                   | 0.082                                                                               |                                                                                     |                                                                                     | 0.296                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1349                                                                              | 1591                                                                              | 0                                                                                 | 1377                                                                              | 1558                                                                              | 155                                                                                 | 3522                                                                                | 1607                                                                                | 562                                                                                 | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 143                                                                               |                                                                                   |                                                                                   | 102                                                                               |                                                                                     |                                                                                     | 57                                                                                  |                                                                                     |                                                                                     | 101                                                                                 |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 288                                                                               |                                                                                   |                                                                                   | 254                                                                               |                                                                                   |                                                                                     | 778                                                                                 |                                                                                     |                                                                                     | 921                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.9                                                                               |                                                                                   |                                                                                   | 6.9                                                                               |                                                                                   |                                                                                     | 11.8                                                                                |                                                                                     |                                                                                     | 14.0                                                                                |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.69                                                                              | 0.69                                                                              | 0.69                                                                              | 0.86                                                                                | 0.86                                                                                | 0.86                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 82                                                                                | 1                                                                                 | 173                                                                               | 10                                                                                | 1                                                                                 | 6                                                                                 | 173                                                                                 | 967                                                                                 | 13                                                                                  | 14                                                                                  | 1685                                                                                | 62                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 83                                                                                | 173                                                                               | 0                                                                                 | 11                                                                                | 6                                                                                 | 173                                                                                 | 967                                                                                 | 13                                                                                  | 14                                                                                  | 1685                                                                                | 62                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.02                                                                              | 1.02                                                                              | 1.02                                                                              | 1.05                                                                              | 1.05                                                                              | 1.05                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              | 23.0                                                                              | 39.9                                                                              | 39.9                                                                              | 39.9                                                                              | 11.0                                                                                | 28.0                                                                                | 28.0                                                                                | 10.0                                                                                | 36.0                                                                                | 36.0                                                                                |

# Lanier Tract DRI

## 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle

no build a.m.

|                         |  |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 39.9                                                                               | 39.9  | 39.9  | 39.9  | 39.9  | 39.9  | 22.0  | 100.1 | 100.1 | 10.0  | 88.1  | 88.1  |
| Total Split (%)         | 26.6%                                                                              | 26.6% | 26.6% | 26.6% | 26.6% | 26.6% | 14.7% | 66.7% | 66.7% | 6.7%  | 58.7% | 58.7% |
| Maximum Green (s)       | 34.0                                                                               | 34.0  | 34.0  | 34.0  | 34.0  | 34.0  | 16.0  | 94.1  | 94.1  | 5.0   | 82.1  | 82.1  |
| Yellow Time (s)         | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 4.4   | 4.4   | 3.5   | 4.4   | 4.4   |
| All-Red Time (s)        | 2.9                                                                                | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 3.0   | 1.6   | 1.6   | 1.5   | 1.6   | 1.6   |
| Lost Time Adjust (s)    |                                                                                    | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |                                                                                    | 5.9   | 5.9   |       | 5.9   | 5.9   | 6.0   | 6.0   | 6.0   | 5.0   | 6.0   | 6.0   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           |                                                                                    |       |       | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    |       |       | 30.0  | 30.0  | 30.0  |       | 18.0  | 18.0  |       | 26.0  | 26.0  |
| Pedestrian Calls (#/hr) |                                                                                    |       |       | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    |                                                                                    | 14.6  | 14.6  |       | 14.6  | 14.6  | 123.5 | 119.1 | 119.1 | 108.8 | 102.1 | 102.1 |
| Actuated g/C Ratio      |                                                                                    | 0.10  | 0.10  |       | 0.10  | 0.10  | 0.82  | 0.79  | 0.79  | 0.73  | 0.68  | 0.68  |
| v/c Ratio               |                                                                                    | 0.64  | 0.61  |       | 0.08  | 0.02  | 0.58  | 0.35  | 0.01  | 0.03  | 0.69  | 0.05  |
| Control Delay           |                                                                                    | 85.5  | 24.1  |       | 59.9  | 0.2   | 29.1  | 4.6   | 0.0   | 4.0   | 14.0  | 0.8   |
| Queue Delay             |                                                                                    | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.1   | 0.0   |
| Total Delay             |                                                                                    | 85.5  | 24.1  |       | 59.9  | 0.2   | 29.1  | 4.6   | 0.0   | 4.0   | 14.1  | 0.8   |
| LOS                     |                                                                                    | F     | C     |       | E     | A     | C     | A     | A     | A     | B     | A     |
| Approach Delay          |                                                                                    | 44.0  |       |       | 38.8  |       |       | 8.2   |       |       | 13.5  |       |
| Approach LOS            |                                                                                    | D     |       |       | D     |       |       | A     |       |       | B     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.69

Intersection Signal Delay: 14.2

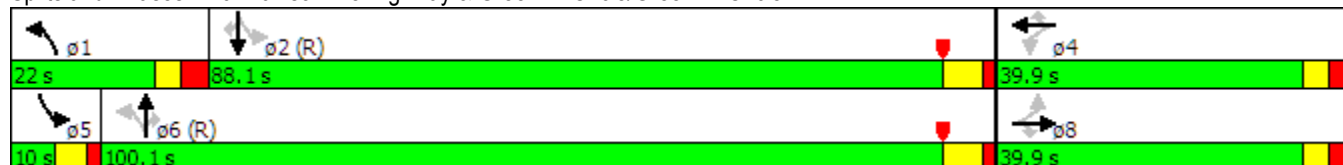
Intersection LOS: B

Intersection Capacity Utilization 76.8%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle





## Lanier Tract DRI

## 10: Dawsonville Highway &amp; Shallowford Rd/Best Buy

no build a.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 152                                                                               | 2                                                                                 | 9                                                                                 | 2                                                                                 | 4                                                                                 | 3                                                                                 | 11                                                                                  | 815                                                                                 | 14                                                                                  | 1                                                                                   | 1379                                                                                | 373                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | -1%                                                                               |                                                                                   |                                                                                   | 10%                                                                               |                                                                                   |                                                                                     | -4%                                                                                 |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 350                                                                               |                                                                                   | 350                                                                               | 0                                                                                 |                                                                                   | 0                                                                                 | 350                                                                                 |                                                                                     | 150                                                                                 | 265                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 100                                                                               |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             | 0.953                                                                             |                                                                                   |                                                                                   | 0.982                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1723                                                                              | 1729                                                                              | 1623                                                                              | 0                                                                                 | 1773                                                                              | 1534                                                                              | 1841                                                                                | 3646                                                                                | 1647                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             | 0.953                                                                             |                                                                                   |                                                                                   | 0.982                                                                             |                                                                                   | 0.125                                                                               |                                                                                     |                                                                                     | 0.292                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1723                                                                              | 1729                                                                              | 1623                                                                              | 0                                                                                 | 1773                                                                              | 1534                                                                              | 242                                                                                 | 3646                                                                                | 1647                                                                                | 558                                                                                 | 3592                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 113                                                                               |                                                                                   |                                                                                   | 119                                                                               |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     | 218                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 653                                                                               |                                                                                   |                                                                                   | 178                                                                               |                                                                                   |                                                                                     | 957                                                                                 |                                                                                     |                                                                                     | 778                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 9.9                                                                               |                                                                                   |                                                                                   | 4.9                                                                               |                                                                                   |                                                                                     | 14.5                                                                                |                                                                                     |                                                                                     | 11.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.84                                                                              | 0.84                                                                              | 0.84                                                                              | 0.56                                                                              | 0.56                                                                              | 0.56                                                                              | 0.83                                                                                | 0.83                                                                                | 0.83                                                                                | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 181                                                                               | 2                                                                                 | 11                                                                                | 4                                                                                 | 7                                                                                 | 5                                                                                 | 13                                                                                  | 982                                                                                 | 17                                                                                  | 1                                                                                   | 1483                                                                                | 401                                                                                 |
| Shared Lane Traffic (%)    | 49%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 92                                                                                | 91                                                                                | 11                                                                                | 0                                                                                 | 11                                                                                | 5                                                                                 | 13                                                                                  | 982                                                                                 | 17                                                                                  | 1                                                                                   | 1483                                                                                | 401                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 0.99                                                                              | 0.99                                                                              | 0.99                                                                              | 1.07                                                                              | 1.07                                                                              | 1.07                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Split                                                                             | NA                                                                                | Perm                                                                              | Split                                                                             | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | Perm                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 3                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 3                                                                                 | 3                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 36.7                                                                              | 36.7                                                                              | 36.7                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                                | 28.8                                                                                | 28.8                                                                                | 30.8                                                                                | 30.8                                                                                | 30.8                                                                                |

# Lanier Tract DRI

## 10: Dawsonville Highway & Shallowford Rd/Best Buy

no build a.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Total Split (s)         | 36.7                                                                              | 36.7                                                                              | 36.7                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                               | 74.4                                                                                | 74.4                                                                                | 63.6                                                                                | 63.6                                                                                | 63.6                                                                                |
| Total Split (%)         | 24.5%                                                                             | 24.5%                                                                             | 24.5%                                                                             | 25.9%                                                                             | 25.9%                                                                             | 25.9%                                                                             | 7.2%                                                                               | 49.6%                                                                               | 49.6%                                                                               | 42.4%                                                                               | 42.4%                                                                               | 42.4%                                                                               |
| Maximum Green (s)       | 30.0                                                                              | 30.0                                                                              | 30.0                                                                              | 33.0                                                                              | 33.0                                                                              | 33.0                                                                              | 5.0                                                                                | 67.6                                                                                | 67.6                                                                                | 56.8                                                                                | 56.8                                                                                | 56.8                                                                                |
| Yellow Time (s)         | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 4.9                                                                                 | 4.9                                                                                 | 4.9                                                                                 | 4.9                                                                                 | 4.9                                                                                 |
| All-Red Time (s)        | 2.2                                                                               | 2.2                                                                               | 2.2                                                                               | 2.9                                                                               | 2.9                                                                               | 2.9                                                                               | 2.8                                                                                | 1.9                                                                                 | 1.9                                                                                 | 1.9                                                                                 | 1.9                                                                                 | 1.9                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.7                                                                               | 6.7                                                                               | 6.7                                                                               |                                                                                   | 5.9                                                                               | 5.9                                                                               | 5.8                                                                                | 6.8                                                                                 | 6.8                                                                                 | 6.8                                                                                 | 6.8                                                                                 | 6.8                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lag                                                                               | Lead                                                                               |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 | Lag                                                                                 |
| Lead-Lag Optimize?      | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                                |                                                                                     |                                                                                     | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                               | C-Min                                                                               | C-Min                                                                               | C-Min                                                                               | C-Min                                                                               | C-Min                                                                               |
| Walk Time (s)           | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                    | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |
| Flash Dont Walk (s)     | 26.0                                                                              | 26.0                                                                              | 26.0                                                                              | 29.0                                                                              | 29.0                                                                              | 29.0                                                                              |                                                                                    | 18.0                                                                                | 18.0                                                                                | 20.0                                                                                | 20.0                                                                                | 20.0                                                                                |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Act Effect Green (s)    | 13.4                                                                              | 13.4                                                                              | 13.4                                                                              |                                                                                   | 6.5                                                                               | 6.5                                                                               | 118.7                                                                              | 117.7                                                                               | 117.7                                                                               | 113.0                                                                               | 113.0                                                                               | 113.0                                                                               |
| Actuated g/C Ratio      | 0.09                                                                              | 0.09                                                                              | 0.09                                                                              |                                                                                   | 0.04                                                                              | 0.04                                                                              | 0.79                                                                               | 0.78                                                                                | 0.78                                                                                | 0.75                                                                                | 0.75                                                                                | 0.75                                                                                |
| v/c Ratio               | 0.60                                                                              | 0.59                                                                              | 0.04                                                                              |                                                                                   | 0.14                                                                              | 0.03                                                                              | 0.05                                                                               | 0.34                                                                                | 0.01                                                                                | 0.00                                                                                | 0.55                                                                                | 0.31                                                                                |
| Control Delay           | 81.2                                                                              | 80.6                                                                              | 0.3                                                                               |                                                                                   | 72.5                                                                              | 0.3                                                                               | 5.8                                                                                | 6.1                                                                                 | 0.0                                                                                 | 7.0                                                                                 | 10.2                                                                                | 4.2                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.3                                                                                 | 0.0                                                                                 |
| Total Delay             | 81.2                                                                              | 80.6                                                                              | 0.3                                                                               |                                                                                   | 72.5                                                                              | 0.3                                                                               | 5.8                                                                                | 6.1                                                                                 | 0.0                                                                                 | 7.0                                                                                 | 10.5                                                                                | 4.2                                                                                 |
| LOS                     | F                                                                                 | F                                                                                 | A                                                                                 |                                                                                   | E                                                                                 | A                                                                                 | A                                                                                  | A                                                                                   | A                                                                                   | A                                                                                   | B                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 76.3                                                                              |                                                                                   |                                                                                   | 49.9                                                                              |                                                                                   |                                                                                    | 6.0                                                                                 |                                                                                     |                                                                                     | 9.1                                                                                 |                                                                                     |
| Approach LOS            |                                                                                   | E                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 45 (30%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 12.5

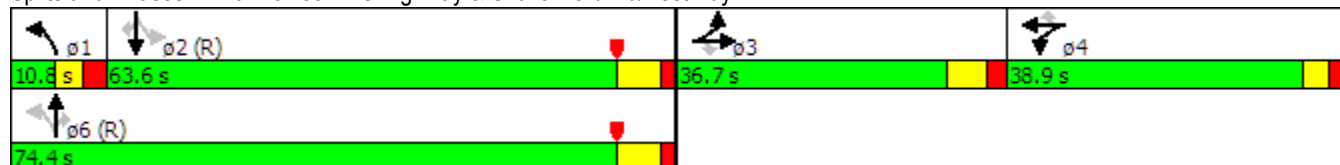
Intersection LOS: B

Intersection Capacity Utilization 62.6%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 10: Dawsonville Highway & Shallowford Rd/Best Buy



Lanier Tract DRI  
1: Sportsman Club Road & Strickland Drive

no build p.m.

Intersection

Int Delay, s/veh 1.7

| Movement                 | WBL  | WBR  | NBT  | NBR  | SBL  | SBT  |
|--------------------------|------|------|------|------|------|------|
| Vol, veh/h               | 8    | 0    | 32   | 10   | 0    | 25   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | 0    | -    | -    | 0    |
| Grade, %                 | 0    | -    | 0    | -    | -    | 0    |
| Peak Hour Factor         | 44   | 44   | 86   | 86   | 82   | 82   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 18   | 0    | 37   | 12   | 0    | 30   |

| Major/Minor          | Minor1 | Major1 | Major2      |
|----------------------|--------|--------|-------------|
| Conflicting Flow All | 73     | 43     | 0 0 49 0    |
| Stage 1              | 43     | -      | - - - -     |
| Stage 2              | 30     | -      | - - - -     |
| Critical Hdwy        | 6.42   | 6.22   | - - 4.12 -  |
| Critical Hdwy Stg 1  | 5.42   | -      | - - - -     |
| Critical Hdwy Stg 2  | 5.42   | -      | - - - -     |
| Follow-up Hdwy       | 3.518  | 3.318  | - - 2.218 - |
| Pot Cap-1 Maneuver   | 931    | 1027   | - - 1558 -  |
| Stage 1              | 979    | -      | - - - -     |
| Stage 2              | 993    | -      | - - - -     |
| Platoon blocked, %   |        |        | - - - -     |
| Mov Cap-1 Maneuver   | 931    | 1027   | - - 1558 -  |
| Mov Cap-2 Maneuver   | 931    | -      | - - - -     |
| Stage 1              | 979    | -      | - - - -     |
| Stage 2              | 993    | -      | - - - -     |

| Approach             | WB  | NB | SB |
|----------------------|-----|----|----|
| HCM Control Delay, s | 8.9 | 0  | 0  |
| HCM LOS              | A   |    |    |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL  | SBT |
|-----------------------|-----|----------|------|-----|
| Capacity (veh/h)      | -   | - 931    | 1558 | -   |
| HCM Lane V/C Ratio    | -   | - 0.02   | -    | -   |
| HCM Control Delay (s) | -   | - 8.9    | 0    | -   |
| HCM Lane LOS          | -   | - A      | A    | -   |
| HCM 95th %tile Q(veh) | -   | - 0.1    | 0    | -   |

Lanier Tract DRI  
2: GA 53 & Sportsman Club Road

no build p.m.

| Intersection               |        |                        |      |                            |       |      |                                |           |      |           |      |      |
|----------------------------|--------|------------------------|------|----------------------------|-------|------|--------------------------------|-----------|------|-----------|------|------|
| Int Delay, s/veh           |        | 34.3                   |      |                            |       |      |                                |           |      |           |      |      |
|                            |        |                        |      |                            |       |      |                                |           |      |           |      |      |
| Movement                   | EBL    | EBT                    | EBR  | WBL                        | WBT   | WBR  | NBL                            | NBT       | NBR  | SBL       | SBT  | SBR  |
| Vol, veh/h                 | 17     | 1147                   | 0    | 2                          | 1845  | 21   | 0                              | 0         | 0    | 31        | 0    | 10   |
| Conflicting Peds, #/hr     | 0      | 0                      | 0    | 0                          | 0     | 0    | 0                              | 0         | 0    | 0         | 0    | 0    |
| Sign Control               | Free   | Free                   | Free | Free                       | Free  | Free | Stop                           | Stop      | Stop | Stop      | Stop | Stop |
| RT Channelized             | -      | -                      | None | -                          | -     | None | -                              | -         | None | -         | -    | None |
| Storage Length             | 0      | -                      | -    | 0                          | -     | -    | -                              | -         | -    | -         | -    | -    |
| Veh in Median Storage, #   | -      | 0                      | -    | -                          | 0     | -    | -                              | 0         | -    | -         | 0    | -    |
| Grade, %                   | -      | 0                      | -    | -                          | 0     | -    | -                              | 0         | -    | -         | 0    | -    |
| Peak Hour Factor           | 95     | 95                     | 95   | 96                         | 96    | 96   | 92                             | 92        | 92   | 66        | 66   | 66   |
| Heavy Vehicles, %          | 2      | 2                      | 2    | 2                          | 2     | 2    | 2                              | 2         | 2    | 2         | 2    | 2    |
| Mvmt Flow                  | 18     | 1207                   | 0    | 2                          | 1922  | 22   | 0                              | 0         | 0    | 47        | 0    | 15   |
|                            |        |                        |      |                            |       |      |                                |           |      |           |      |      |
| Major/Minor                | Major1 |                        |      | Major2                     |       |      | Minor1                         |           |      | Minor2    |      |      |
| Conflicting Flow All       | 1944   | 0                      | 0    | 1207                       | 0     | 0    | 2208                           | 3191      | 604  | 2576      | 3180 | 972  |
| Stage 1                    | -      | -                      | -    | -                          | -     | -    | 1243                           | 1243      | -    | 1937      | 1937 | -    |
| Stage 2                    | -      | -                      | -    | -                          | -     | -    | 965                            | 1948      | -    | 639       | 1243 | -    |
| Critical Hdwy              | 4.14   | -                      | -    | 4.14                       | -     | -    | 7.54                           | 6.54      | 6.94 | 7.54      | 6.54 | 6.94 |
| Critical Hdwy Stg 1        | -      | -                      | -    | -                          | -     | -    | 6.54                           | 5.54      | -    | 6.54      | 5.54 | -    |
| Critical Hdwy Stg 2        | -      | -                      | -    | -                          | -     | -    | 6.54                           | 5.54      | -    | 6.54      | 5.54 | -    |
| Follow-up Hdwy             | 2.22   | -                      | -    | 2.22                       | -     | -    | 3.52                           | 4.02      | 3.32 | 3.52      | 4.02 | 3.32 |
| Pot Cap-1 Maneuver         | 298    | -                      | -    | 574                        | -     | -    | 24                             | 10        | 441  | ~ 13      | 10   | 252  |
| Stage 1                    | -      | -                      | -    | -                          | -     | -    | 185                            | 245       | -    | 68        | 111  | -    |
| Stage 2                    | -      | -                      | -    | -                          | -     | -    | 274                            | 110       | -    | 431       | 245  | -    |
| Platoon blocked, %         |        | -                      | -    |                            | -     | -    |                                |           |      |           |      |      |
| Mov Cap-1 Maneuver         | 298    | -                      | -    | 574                        | -     | -    | 21                             | 9         | 441  | ~ 12      | 9    | 252  |
| Mov Cap-2 Maneuver         | -      | -                      | -    | -                          | -     | -    | 21                             | 9         | -    | ~ 12      | 9    | -    |
| Stage 1                    | -      | -                      | -    | -                          | -     | -    | 174                            | 230       | -    | 64        | 111  | -    |
| Stage 2                    | -      | -                      | -    | -                          | -     | -    | 257                            | 110       | -    | 405       | 230  | -    |
|                            |        |                        |      |                            |       |      |                                |           |      |           |      |      |
| Approach                   | EB     |                        |      | WB                         |       |      | NB                             |           |      | SB        |      |      |
| HCM Control Delay, s       | 0.3    |                        |      | 0                          |       |      | 0                              |           |      | \$ 1780.7 |      |      |
| HCM LOS                    |        |                        |      |                            |       |      | A                              |           |      | F         |      |      |
|                            |        |                        |      |                            |       |      |                                |           |      |           |      |      |
| Minor Lane/Major Mvmt      | NBLn1  | EBL                    | EBT  | EBR                        | WBL   | WBT  | WBR                            | SBLn1     |      |           |      |      |
| Capacity (veh/h)           | -      | 298                    | -    | -                          | 574   | -    | -                              | 16        |      |           |      |      |
| HCM Lane V/C Ratio         | -      | 0.06                   | -    | -                          | 0.004 | -    | -                              | 3.883     |      |           |      |      |
| HCM Control Delay (s)      | 0      | 17.9                   | -    | -                          | 11.3  | -    |                                | \$ 1780.7 |      |           |      |      |
| HCM Lane LOS               | A      | C                      | -    | -                          | B     | -    | -                              | F         |      |           |      |      |
| HCM 95th %tile Q(veh)      | -      | 0.2                    | -    | -                          | 0     | -    | -                              | 8.5       |      |           |      |      |
| Notes                      |        |                        |      |                            |       |      |                                |           |      |           |      |      |
| ~: Volume exceeds capacity |        | \$: Delay exceeds 300s |      | +: Computation Not Defined |       |      | *: All major volume in platoon |           |      |           |      |      |

| Intersection             |        |        |       |        |      |      |
|--------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh         | 1.5    |        |       |        |      |      |
|                          |        |        |       |        |      |      |
| Movement                 | EBL    | EBR    | NBL   | NBT    | SBT  | SBR  |
| Vol, veh/h               | 11     | 52     | 68    | 1822   | 1217 | 15   |
| Conflicting Peds, #/hr   | 0      | 0      | 0     | 0      | 0    | 0    |
| Sign Control             | Stop   | Stop   | Free  | Free   | Free | Free |
| RT Channelized           | -      | None   | -     | None   | -    | None |
| Storage Length           | 0      | 0      | 0     | -      | -    | 0    |
| Veh in Median Storage, # | 0      | -      | -     | 0      | 0    | -    |
| Grade, %                 | 0      | -      | -     | 0      | 0    | -    |
| Peak Hour Factor         | 76     | 76     | 95    | 95     | 100  | 100  |
| Heavy Vehicles, %        | 2      | 2      | 2     | 2      | 2    | 2    |
| Mvmt Flow                | 14     | 68     | 72    | 1918   | 1217 | 15   |
|                          |        |        |       |        |      |      |
| Major/Minor              | Minor2 | Major1 |       | Major2 |      |      |
| Conflicting Flow All     | 2319   | 609    | 1217  | 0      | -    | 0    |
| Stage 1                  | 1217   | -      | -     | -      | -    | -    |
| Stage 2                  | 1102   | -      | -     | -      | -    | -    |
| Critical Hdwy            | 6.84   | 6.94   | 4.14  | -      | -    | -    |
| Critical Hdwy Stg 1      | 5.84   | -      | -     | -      | -    | -    |
| Critical Hdwy Stg 2      | 5.84   | -      | -     | -      | -    | -    |
| Follow-up Hdwy           | 3.52   | 3.32   | 2.22  | -      | -    | -    |
| Pot Cap-1 Maneuver       | 32     | 438    | 569   | -      | -    | -    |
| Stage 1                  | 243    | -      | -     | -      | -    | -    |
| Stage 2                  | 280    | -      | -     | -      | -    | -    |
| Platoon blocked, %       |        |        |       | -      | -    | -    |
| Mov Cap-1 Maneuver       | 28     | 438    | 569   | -      | -    | -    |
| Mov Cap-2 Maneuver       | 28     | -      | -     | -      | -    | -    |
| Stage 1                  | 243    | -      | -     | -      | -    | -    |
| Stage 2                  | 245    | -      | -     | -      | -    | -    |
|                          |        |        |       |        |      |      |
| Approach                 | EB     | NB     |       | SB     |      |      |
| HCM Control Delay, s     | 52.1   | 0.4    |       | 0      |      |      |
| HCM LOS                  | F      |        |       |        |      |      |
|                          |        |        |       |        |      |      |
| Minor Lane/Major Mvmt    | NBL    | NBT    | EBLn1 | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)         | 569    | -      | 28    | 438    | -    | -    |
| HCM Lane V/C Ratio       | 0.126  | -      | 0.517 | 0.156  | -    | -    |
| HCM Control Delay (s)    | 12.2   | -      | 229.1 | 14.7   | -    | -    |
| HCM Lane LOS             | B      | -      | F     | B      | -    | -    |
| HCM 95th %tile Q(veh)    | 0.4    | -      | 1.6   | 0.5    | -    | -    |

| Intersection             |        |        |          |        |      |      |
|--------------------------|--------|--------|----------|--------|------|------|
| Int Delay, s/veh         | 1.7    |        |          |        |      |      |
| Movement                 | EBL    | EBR    | NBL      | NBT    | SBT  | SBR  |
| Vol, veh/h               | 8      | 31     | 123      | 1857   | 1223 | 15   |
| Conflicting Peds, #/hr   | 0      | 0      | 0        | 0      | 0    | 0    |
| Sign Control             | Stop   | Stop   | Free     | Free   | Free | Free |
| RT Channelized           | -      | None   | -        | None   | -    | None |
| Storage Length           | 0      | 0      | 0        | -      | -    | 0    |
| Veh in Median Storage, # | 0      | -      | -        | 0      | 0    | -    |
| Grade, %                 | 0      | -      | -        | 0      | 0    | -    |
| Peak Hour Factor         | 80     | 80     | 96       | 96     | 96   | 96   |
| Heavy Vehicles, %        | 2      | 2      | 2        | 2      | 2    | 2    |
| Mvmt Flow                | 10     | 39     | 128      | 1934   | 1274 | 16   |
| Major/Minor              | Minor2 | Major1 |          | Major2 |      |      |
| Conflicting Flow All     | 2497   | 637    | 1274     | 0      | -    | 0    |
| Stage 1                  | 1274   | -      | -        | -      | -    | -    |
| Stage 2                  | 1223   | -      | -        | -      | -    | -    |
| Critical Hdwy            | 6.84   | 6.94   | 4.14     | -      | -    | -    |
| Critical Hdwy Stg 1      | 5.84   | -      | -        | -      | -    | -    |
| Critical Hdwy Stg 2      | 5.84   | -      | -        | -      | -    | -    |
| Follow-up Hdwy           | 3.52   | 3.32   | 2.22     | -      | -    | -    |
| Pot Cap-1 Maneuver       | 24     | 420    | 541      | -      | -    | -    |
| Stage 1                  | 226    | -      | -        | -      | -    | -    |
| Stage 2                  | 241    | -      | -        | -      | -    | -    |
| Platoon blocked, %       |        |        |          | -      | -    | -    |
| Mov Cap-1 Maneuver       | 18     | 420    | 541      | -      | -    | -    |
| Mov Cap-2 Maneuver       | 18     | -      | -        | -      | -    | -    |
| Stage 1                  | 226    | -      | -        | -      | -    | -    |
| Stage 2                  | 184    | -      | -        | -      | -    | -    |
| Approach                 | EB     | NB     |          | SB     |      |      |
| HCM Control Delay, s     | 83.2   | 0.9    |          | 0      |      |      |
| HCM LOS                  | F      |        |          |        |      |      |
| Minor Lane/Major Mvmt    | NBL    | NBT    | EBLn1    | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)         | 541    | -      | 18       | 420    | -    | -    |
| HCM Lane V/C Ratio       | 0.237  | -      | 0.556    | 0.092  | -    | -    |
| HCM Control Delay (s)    | 13.7   | -      | \$ 349.9 | 14.4   | -    | -    |
| HCM Lane LOS             | B      | -      | F        | B      | -    | -    |
| HCM 95th %tile Q(veh)    | 0.9    | -      | 1.5      | 0.3    | -    | -    |

Lanier Tract DRI  
7: GA 53 & Beechwood Boulevard

no build p.m.

| Intersection             |        |        |       |        |      |      |
|--------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh         | 0.9    |        |       |        |      |      |
| Movement                 | EBL    | EBR    | NBL   | NBT    | SBT  | SBR  |
| Vol, veh/h               | 1      | 52     | 95    | 2206   | 1532 | 10   |
| Conflicting Peds, #/hr   | 0      | 0      | 0     | 0      | 0    | 0    |
| Sign Control             | Stop   | Stop   | Free  | Free   | Free | Free |
| RT Channelized           | -      | Yield  | -     | Yield  | -    | None |
| Storage Length           | 0      | 0      | 200   | -      | -    | 360  |
| Veh in Median Storage, # | 0      | -      | -     | 0      | 0    | -    |
| Grade, %                 | 0      | -      | -     | 1      | 0    | -    |
| Peak Hour Factor         | 71     | 71     | 99    | 99     | 98   | 98   |
| Heavy Vehicles, %        | 0      | 0      | 0     | 0      | 1    | 0    |
| Mvmt Flow                | 1      | 73     | 96    | 2228   | 1563 | 10   |
| Major/Minor              | Minor2 | Major1 |       | Major2 |      |      |
| Conflicting Flow All     | 2869   | 783    | 1563  | 0      | -    | 0    |
| Stage 1                  | 1563   | -      | -     | -      | -    | -    |
| Stage 2                  | 1306   | -      | -     | -      | -    | -    |
| Critical Hdwy            | 6.8    | 6.9    | 4.1   | -      | -    | -    |
| Critical Hdwy Stg 1      | 5.8    | -      | -     | -      | -    | -    |
| Critical Hdwy Stg 2      | 5.8    | -      | -     | -      | -    | -    |
| Follow-up Hdwy           | 3.5    | 3.3    | 2.2   | -      | -    | -    |
| Pot Cap-1 Maneuver       | 14     | 341    | 428   | -      | -    | -    |
| Stage 1                  | 161    | -      | -     | -      | -    | -    |
| Stage 2                  | 221    | -      | -     | -      | -    | -    |
| Platoon blocked, %       |        |        |       | -      | -    | -    |
| Mov Cap-1 Maneuver       | 11     | 341    | 428   | -      | -    | -    |
| Mov Cap-2 Maneuver       | 11     | -      | -     | -      | -    | -    |
| Stage 1                  | 161    | -      | -     | -      | -    | -    |
| Stage 2                  | 171    | -      | -     | -      | -    | -    |
| Approach                 | EB     | NB     |       | SB     |      |      |
| HCM Control Delay, s     | 25.1   | 0.7    |       | 0      |      |      |
| HCM LOS                  | D      |        |       |        |      |      |
| Minor Lane/Major Mvmt    | NBL    | NBT    | EBLn1 | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)         | 428    | -      | 11    | 341    | -    | -    |
| HCM Lane V/C Ratio       | 0.224  | -      | 0.128 | 0.215  | -    | -    |
| HCM Control Delay (s)    | 15.8   | -      | 375.6 | 18.4   | -    | -    |
| HCM Lane LOS             | C      | -      | F     | C      | -    | -    |
| HCM 95th %tile Q(veh)    | 0.8    | -      | 0.3   | 0.8    | -    | -    |

Lanier Tract DRI

5: GA 53 & Lanier Valley Dr/Ahaluna Dr

no build p.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Volume (vph)               | 23                                                                                | 1                                                                                 | 106                                                                               | 41                                                                                | 8                                                                                 | 56                                                                                | 198                                                                                 | 1918                                                                                | 42                                                                                  | 22                                                                                  | 1326                                                                                | 3                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 2%                                                                                |                                                                                   |                                                                                   | -4%                                                                               |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 100                                                                                 |                                                                                     | 0                                                                                   | 140                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.890                                                                             |                                                                                   |                                                                                   | 0.928                                                                             |                                                                                   |                                                                                     | 0.997                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   | 0.991                                                                             |                                                                                   |                                                                                   | 0.981                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1659                                                                              | 0                                                                                 | 0                                                                                 | 1764                                                                              | 0                                                                                 | 1796                                                                                | 3581                                                                                | 0                                                                                   | 1814                                                                                | 3592                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.860                                                                             |                                                                                   |                                                                                   | 0.589                                                                             |                                                                                   | 0.143                                                                               |                                                                                     |                                                                                     | 0.080                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1440                                                                              | 0                                                                                 | 0                                                                                 | 1059                                                                              | 0                                                                                 | 270                                                                                 | 3581                                                                                | 0                                                                                   | 153                                                                                 | 3592                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 119                                                                               |                                                                                   |                                                                                   | 31                                                                                |                                                                                   |                                                                                     | 4                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 340                                                                               |                                                                                   |                                                                                   | 322                                                                               |                                                                                   |                                                                                     | 1002                                                                                |                                                                                     |                                                                                     | 1457                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.7                                                                               |                                                                                   |                                                                                   | 7.3                                                                               |                                                                                   |                                                                                     | 15.2                                                                                |                                                                                     |                                                                                     | 22.1                                                                                |                                                                                     |
| Peak Hour Factor           | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.85                                                                              | 0.85                                                                              | 0.85                                                                              | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 26                                                                                | 1                                                                                 | 119                                                                               | 48                                                                                | 9                                                                                 | 66                                                                                | 206                                                                                 | 1998                                                                                | 44                                                                                  | 23                                                                                  | 1381                                                                                | 3                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 146                                                                               | 0                                                                                 | 0                                                                                 | 123                                                                               | 0                                                                                 | 206                                                                                 | 2042                                                                                | 0                                                                                   | 23                                                                                  | 1384                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 |                                                                                     | 0                                                                                   | 336                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   |                                                                                     | 0                                                                                   | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 8                                                                                 | 8                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 10.6                                                                                | 23.0                                                                                |                                                                                     | 23.0                                                                                | 23.0                                                                                |                                                                                     |



# Lanier Tract DRI

## 5: GA 53 & Lanier Valley Dr/Ahaluna Dr

no build p.m.

| Lane Group            | EBL   | EBT   | EBR | WBL   | WBT   | WBR | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
|-----------------------|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Total Split (s)       | 33.0  | 33.0  |     | 33.0  | 33.0  |     | 28.0  | 127.0 |     | 99.0  | 99.0  |     |
| Total Split (%)       | 20.6% | 20.6% |     | 20.6% | 20.6% |     | 17.5% | 79.4% |     | 61.9% | 61.9% |     |
| Maximum Green (s)     | 26.4  | 26.4  |     | 26.4  | 26.4  |     | 22.4  | 120.9 |     | 92.9  | 92.9  |     |
| Yellow Time (s)       | 4.0   | 4.0   |     | 4.0   | 4.0   |     | 3.0   | 4.5   |     | 4.5   | 4.5   |     |
| All-Red Time (s)      | 2.6   | 2.6   |     | 2.6   | 2.6   |     | 2.6   | 1.6   |     | 1.6   | 1.6   |     |
| Lost Time Adjust (s)  |       | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Lost Time (s)   |       | 6.6   |     |       | 6.6   |     | 5.6   | 6.1   |     | 6.1   | 6.1   |     |
| Lead/Lag              |       |       |     |       |       |     | Lead  |       |     | Lag   | Lag   |     |
| Lead-Lag Optimize?    |       |       |     |       |       |     | Yes   |       |     | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode           | None  | None  |     | None  | None  |     | None  | C-Max |     | C-Max | C-Max |     |
| Act Effect Green (s)  |       | 17.5  |     |       | 17.5  |     | 130.3 | 129.8 |     | 112.6 | 112.6 |     |
| Actuated g/C Ratio    |       | 0.11  |     |       | 0.11  |     | 0.81  | 0.81  |     | 0.70  | 0.70  |     |
| v/c Ratio             |       | 0.56  |     |       | 0.86  |     | 0.62  | 0.70  |     | 0.21  | 0.55  |     |
| Control Delay         |       | 23.8  |     |       | 96.6  |     | 18.7  | 10.7  |     | 18.1  | 13.9  |     |
| Queue Delay           |       | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay           |       | 23.8  |     |       | 96.6  |     | 18.7  | 10.7  |     | 18.1  | 13.9  |     |
| LOS                   |       | C     |     |       | F     |     | B     | B     |     | B     | B     |     |
| Approach Delay        |       | 23.8  |     |       | 96.6  |     |       | 11.5  |     |       | 14.0  |     |
| Approach LOS          |       | C     |     |       | F     |     |       | B     |     |       | B     |     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 129 (81%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 15.5

Intersection LOS: B

Intersection Capacity Utilization 86.1%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 5: GA 53 & Lanier Valley Dr/Ahaluna Dr



## Lanier Tract DRI

## 6: 53-Dawsonville Hwy &amp; Academy Sports

no build p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |  |    |  |  |  |  |  |
| Volume (vph)               | 14                                                                                | 3                                                                                 | 66                                                                                | 130                                                                               | 8                                                                                 | 46                                                                                | 96                                                                                  | 1947                                                                                | 152                                                                                 | 21                                                                                  | 1324                                                                                | 30                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 4%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 70                                                                                | 200                                                                                 |                                                                                     | 170                                                                                 | 190                                                                                 |                                                                                     | 360                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1805                                                                              | 1900                                                                              | 1615                                                                              | 1769                                                                              | 1862                                                                              | 1583                                                                              | 1796                                                                                | 3592                                                                                | 1607                                                                                | 1805                                                                                | 3574                                                                                | 1615                                                                                |
| Flt Permitted              | 0.751                                                                             |                                                                                   |                                                                                   | 0.756                                                                             |                                                                                   |                                                                                   | 0.144                                                                               |                                                                                     |                                                                                     | 0.054                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1427                                                                              | 1900                                                                              | 1615                                                                              | 1408                                                                              | 1862                                                                              | 1583                                                                              | 272                                                                                 | 3592                                                                                | 1607                                                                                | 103                                                                                 | 3574                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 69                                                                                |                                                                                   |                                                                                   | 63                                                                                |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     | 64                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 262                                                                               |                                                                                   |                                                                                   | 246                                                                               |                                                                                   |                                                                                     | 1836                                                                                |                                                                                     |                                                                                     | 685                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.1                                                                               |                                                                                   |                                                                                   | 6.7                                                                               |                                                                                   |                                                                                     | 27.8                                                                                |                                                                                     |                                                                                     | 10.4                                                                                |                                                                                     |
| Peak Hour Factor           | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.80                                                                              | 0.80                                                                              | 0.80                                                                              | 0.98                                                                                | 0.98                                                                                | 0.98                                                                                | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 15                                                                                | 3                                                                                 | 69                                                                                | 162                                                                               | 10                                                                                | 58                                                                                | 98                                                                                  | 1987                                                                                | 155                                                                                 | 22                                                                                  | 1365                                                                                | 31                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 15                                                                                | 3                                                                                 | 69                                                                                | 162                                                                               | 10                                                                                | 58                                                                                | 98                                                                                  | 1987                                                                                | 155                                                                                 | 22                                                                                  | 1365                                                                                | 31                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 2                                                                                   |                                                                                     | 2                                                                                   | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 42.0                                                                              | 42.0                                                                              | 42.0                                                                              | 42.4                                                                              | 42.4                                                                              | 42.4                                                                              | 11.4                                                                                | 30.3                                                                                | 30.3                                                                                | 11.0                                                                                | 29.3                                                                                | 29.3                                                                                |

# Lanier Tract DRI

## 6: 53-Dawsonville Hwy & Academy Sports

no build p.m.

| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Total Split (s)         | 42.4  | 42.4  | 42.4  | 42.4  | 42.4  | 42.4  | 15.6  | 106.6 | 106.6 | 11.0  | 102.0 | 102.0 |
| Total Split (%)         | 26.5% | 26.5% | 26.5% | 26.5% | 26.5% | 26.5% | 9.8%  | 66.6% | 66.6% | 6.9%  | 63.8% | 63.8% |
| Maximum Green (s)       | 36.0  | 36.0  | 36.0  | 36.0  | 36.0  | 36.0  | 9.2   | 100.4 | 100.4 | 5.0   | 95.8  | 95.8  |
| Yellow Time (s)         | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 4.3   | 4.3   | 3.0   | 4.3   | 4.3   |
| All-Red Time (s)        | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 1.9   | 1.9   | 3.0   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.2   | 6.2   | 6.0   | 6.2   | 6.2   |
| Lead/Lag                |       |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None  | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 23.0  | 23.0  | 23.0  | 32.0  | 32.0  | 32.0  |       | 20.0  | 20.0  |       | 19.0  | 19.0  |
| Pedestrian Calls (#/hr) | 0     | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    | 23.7  | 23.7  | 23.7  | 23.7  | 23.7  | 23.7  | 121.3 | 116.4 | 116.4 | 115.8 | 109.6 | 109.6 |
| Actuated g/C Ratio      | 0.15  | 0.15  | 0.15  | 0.15  | 0.15  | 0.15  | 0.76  | 0.73  | 0.73  | 0.72  | 0.68  | 0.68  |
| v/c Ratio               | 0.07  | 0.01  | 0.23  | 0.78  | 0.04  | 0.20  | 0.35  | 0.76  | 0.13  | 0.16  | 0.56  | 0.03  |
| Control Delay           | 55.8  | 53.3  | 13.0  | 89.1  | 54.6  | 11.7  | 9.3   | 15.7  | 7.2   | 7.5   | 10.9  | 0.0   |
| Queue Delay             | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.1   | 0.0   |
| Total Delay             | 55.8  | 53.3  | 13.0  | 89.1  | 54.6  | 11.7  | 9.3   | 15.7  | 7.2   | 7.5   | 11.0  | 0.0   |
| LOS                     | E     | D     | B     | F     | D     | B     | A     | B     | A     | A     | B     | A     |
| Approach Delay          |       | 21.8  |       |       | 68.1  |       |       | 14.8  |       |       | 10.7  |       |
| Approach LOS            |       | C     |       |       | E     |       |       | B     |       |       | B     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 120 (75%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 135

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 16.6

Intersection LOS: B

Intersection Capacity Utilization 87.4%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 6: 53-Dawsonville Hwy & Academy Sports

|        |         |  |        |
|--------|---------|--|--------|
|        |         |  |        |
| 11 s   | 106.6 s |  | 42.4 s |
|        |         |  |        |
| 15.6 s | 102 s   |  | 42.4 s |

## Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 &amp; McEver Road/McEver

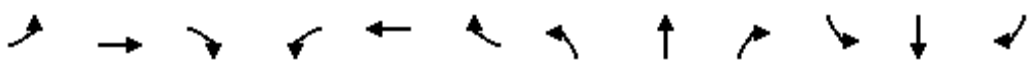
no build p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |                                                                                   |   |  |  |  |  |  |
| Volume (vph)               | 933                                                                               | 235                                                                               | 426                                                                               | 96                                                                                | 100                                                                               | 89                                                                                | 478                                                                                 | 1504                                                                                | 51                                                                                  | 68                                                                                  | 1136                                                                                | 531                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 1%                                                                                |                                                                                   |                                                                                   | 5%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 180                                                                               |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 310                                                                                 |                                                                                     | 185                                                                                 | 255                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 50                                                                                |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.951                                                                             | 0.850                                                                             |                                                                                   | 0.929                                                                             |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 3484                                                                              | 1708                                                                              | 1527                                                                              | 1760                                                                              | 1721                                                                              | 0                                                                                 | 3484                                                                                | 3592                                                                                | 1607                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   | 0.465                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 3484                                                                              | 1708                                                                              | 1527                                                                              | 861                                                                               | 1721                                                                              | 0                                                                                 | 3484                                                                                | 3592                                                                                | 1607                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 18                                                                                | 326                                                                               |                                                                                   | 27                                                                                |                                                                                   |                                                                                     |                                                                                     | 172                                                                                 |                                                                                     |                                                                                     | 312                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 580                                                                               |                                                                                   |                                                                                   | 331                                                                               |                                                                                   |                                                                                     | 921                                                                                 |                                                                                     |                                                                                     | 1504                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 8.8                                                                               |                                                                                   |                                                                                   | 9.0                                                                               |                                                                                   |                                                                                     | 14.0                                                                                |                                                                                     |                                                                                     | 22.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.86                                                                              | 0.86                                                                              | 0.86                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 982                                                                               | 247                                                                               | 448                                                                               | 112                                                                               | 116                                                                               | 103                                                                               | 493                                                                                 | 1551                                                                                | 53                                                                                  | 75                                                                                  | 1248                                                                                | 584                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   | 27%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 982                                                                               | 368                                                                               | 327                                                                               | 112                                                                               | 219                                                                               | 0                                                                                 | 493                                                                                 | 1551                                                                                | 53                                                                                  | 75                                                                                  | 1248                                                                                | 584                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 24                                                                                |                                                                                   |                                                                                   | 24                                                                                |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                             | NA                                                                                |                                                                                   | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 8                                                                                 |                                                                                   | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 8                                                                                 | 8                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 13.2                                                                              | 50.2                                                                              | 50.2                                                                              | 11.6                                                                              | 48.2                                                                              |                                                                                   | 13.4                                                                                | 35.6                                                                                | 35.6                                                                                | 12.9                                                                                | 44.6                                                                                | 44.6                                                                                |

# Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 & McEver Road/McEver

no build p.m.

|                         |  |       |       |      |       |     |       |       |       |      |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|------|-------|-----|-------|-------|-------|------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL  | WBT   | WBR | NBL   | NBT   | NBR   | SBL  | SBT   | SBR   |
| Total Split (s)         | 35.0                                                                               | 69.5  | 69.5  | 13.7 | 48.2  |     | 23.0  | 63.8  | 63.8  | 13.0 | 53.8  | 53.8  |
| Total Split (%)         | 21.9%                                                                              | 43.4% | 43.4% | 8.6% | 30.1% |     | 14.4% | 39.9% | 39.9% | 8.1% | 33.6% | 33.6% |
| Maximum Green (s)       | 27.7                                                                               | 62.2  | 62.2  | 7.2  | 40.9  |     | 15.5  | 57.2  | 57.2  | 5.8  | 47.2  | 47.2  |
| Yellow Time (s)         | 4.3                                                                                | 4.3   | 4.3   | 3.5  | 4.3   |     | 4.5   | 4.4   | 4.4   | 4.2  | 4.4   | 4.4   |
| All-Red Time (s)        | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 2.2   | 2.2   | 3.0  | 2.2   | 2.2   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Lost Time (s)     | 7.3                                                                                | 7.3   | 7.3   | 6.5  | 7.3   |     | 7.5   | 6.6   | 6.6   | 7.2  | 6.6   | 6.6   |
| Lead/Lag                | Lead                                                                               | Lag   | Lag   | Lead | Lag   |     | Lag   | Lag   | Lag   | Lead | Lead  | Lead  |
| Lead-Lag Optimize?      | Yes                                                                                | Yes   | Yes   | Yes  | Yes   |     | Yes   | Yes   | Yes   | Yes  | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None | None  |     | None  | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s)           |                                                                                    | 4.0   | 4.0   |      | 4.0   |     |       | 4.0   | 4.0   |      | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    | 38.0  | 38.0  |      | 36.0  |     |       | 25.0  | 25.0  |      | 34.0  | 34.0  |
| Pedestrian Calls (#/hr) |                                                                                    | 0     | 0     |      | 0     |     |       | 0     | 0     |      | 0     | 0     |
| Act Effect Green (s)    | 27.7                                                                               | 44.8  | 44.8  | 31.5 | 23.5  |     | 15.5  | 65.4  | 65.4  | 15.0 | 64.6  | 64.6  |
| Actuated g/C Ratio      | 0.17                                                                               | 0.28  | 0.28  | 0.20 | 0.15  |     | 0.10  | 0.41  | 0.41  | 0.09 | 0.40  | 0.40  |
| v/c Ratio               | 1.63                                                                               | 0.75  | 0.49  | 0.54 | 0.80  |     | 1.46  | 1.06  | 0.07  | 0.44 | 0.86  | 0.69  |
| Control Delay           | 329.5                                                                              | 59.4  | 6.5   | 47.6 | 77.6  |     | 273.4 | 95.6  | 0.1   | 69.6 | 66.1  | 38.9  |
| Queue Delay             | 0.0                                                                                | 2.9   | 0.6   | 9.2  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Delay             | 329.5                                                                              | 62.2  | 7.0   | 56.8 | 77.6  |     | 273.4 | 95.6  | 0.1   | 69.6 | 66.1  | 38.9  |
| LOS                     | F                                                                                  | E     | A     | E    | E     |     | F     | F     | A     | E    | E     | D     |
| Approach Delay          |                                                                                    | 208.0 |       |      | 70.6  |     |       | 135.0 |       |      | 57.9  |       |
| Approach LOS            |                                                                                    | F     |       |      | E     |     |       | F     |       |      | E     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 52 (33%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.63

Intersection Signal Delay: 127.3

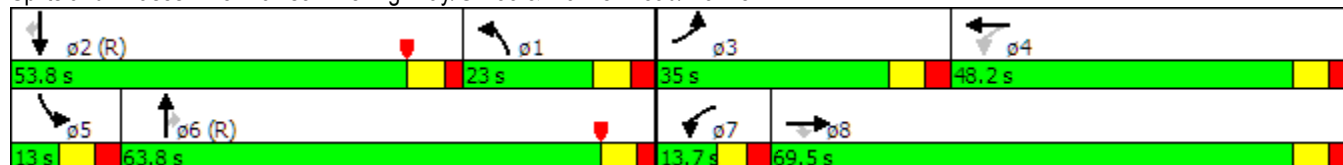
Intersection LOS: F

Intersection Capacity Utilization 106.7%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 8: Dawsonville Highway/GA 53 & McEver Road/McEver



## Lanier Tract DRI

## 9: Dawsonville Highway &amp; Greenhill Circle/Greenhill Circle

no build p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 146                                                                               | 10                                                                                | 152                                                                               | 66                                                                                | 22                                                                                | 42                                                                                | 274                                                                                 | 1931                                                                                | 77                                                                                  | 44                                                                                  | 1537                                                                                | 59                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 3%                                                                                |                                                                                   |                                                                                   | 7%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 190                                                                                 |                                                                                     | 190                                                                                 | 185                                                                                 |                                                                                     | 100                                                                                 |
| Storage Lanes              | 0                                                                                 |                                                                                   | 1                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              |                                                                                   | 0.955                                                                             |                                                                                   |                                                                                   | 0.964                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1787                                                                              | 1591                                                                              | 0                                                                                 | 1767                                                                              | 1558                                                                              | 1796                                                                                | 3592                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   | 0.591                                                                             |                                                                                   |                                                                                   | 0.482                                                                             |                                                                                   | 0.054                                                                               |                                                                                     |                                                                                     | 0.055                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1106                                                                              | 1591                                                                              | 0                                                                                 | 884                                                                               | 1558                                                                              | 102                                                                                 | 3592                                                                                | 1607                                                                                | 104                                                                                 | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 167                                                                               |                                                                                   |                                                                                   | 95                                                                                |                                                                                     |                                                                                     | 54                                                                                  |                                                                                     |                                                                                     | 95                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 288                                                                               |                                                                                   |                                                                                   | 254                                                                               |                                                                                   |                                                                                     | 778                                                                                 |                                                                                     |                                                                                     | 921                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.9                                                                               |                                                                                   |                                                                                   | 6.9                                                                               |                                                                                   |                                                                                     | 11.8                                                                                |                                                                                     |                                                                                     | 14.0                                                                                |                                                                                     |
| Peak Hour Factor           | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.78                                                                              | 0.78                                                                              | 0.78                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 160                                                                               | 11                                                                                | 167                                                                               | 85                                                                                | 28                                                                                | 54                                                                                | 282                                                                                 | 1991                                                                                | 79                                                                                  | 46                                                                                  | 1618                                                                                | 62                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 171                                                                               | 167                                                                               | 0                                                                                 | 113                                                                               | 54                                                                                | 282                                                                                 | 1991                                                                                | 79                                                                                  | 46                                                                                  | 1618                                                                                | 62                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.02                                                                              | 1.02                                                                              | 1.02                                                                              | 1.05                                                                              | 1.05                                                                              | 1.05                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              | 23.0                                                                              | 39.9                                                                              | 39.9                                                                              | 39.9                                                                              | 11.0                                                                                | 28.0                                                                                | 28.0                                                                                | 10.0                                                                                | 36.0                                                                                | 36.0                                                                                |

# Lanier Tract DRI

## 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle

no build p.m.

|                         |  |       |       |       |       |       |       |       |       |      |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL  | SBT   | SBR   |
| Total Split (s)         | 39.9                                                                               | 39.9  | 39.9  | 39.9  | 39.9  | 39.9  | 32.0  | 110.1 | 110.1 | 10.0 | 88.1  | 88.1  |
| Total Split (%)         | 24.9%                                                                              | 24.9% | 24.9% | 24.9% | 24.9% | 24.9% | 20.0% | 68.8% | 68.8% | 6.3% | 55.1% | 55.1% |
| Maximum Green (s)       | 34.0                                                                               | 34.0  | 34.0  | 34.0  | 34.0  | 34.0  | 26.0  | 104.1 | 104.1 | 5.0  | 82.1  | 82.1  |
| Yellow Time (s)         | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 4.4   | 4.4   | 3.5  | 4.4   | 4.4   |
| All-Red Time (s)        | 2.9                                                                                | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 3.0   | 1.6   | 1.6   | 1.5  | 1.6   | 1.6   |
| Lost Time Adjust (s)    |                                                                                    | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Lost Time (s)     |                                                                                    | 5.9   | 5.9   |       | 5.9   | 5.9   | 6.0   | 6.0   | 6.0   | 5.0  | 6.0   | 6.0   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes  | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s)           |                                                                                    |       |       | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |      | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    |       |       | 30.0  | 30.0  | 30.0  |       | 18.0  | 18.0  |      | 26.0  | 26.0  |
| Pedestrian Calls (#/hr) |                                                                                    |       |       | 0     | 0     | 0     |       | 0     | 0     |      | 0     | 0     |
| Act Effect Green (s)    |                                                                                    | 28.1  | 28.1  |       | 28.1  | 28.1  | 120.0 | 111.5 | 111.5 | 96.9 | 90.2  | 90.2  |
| Actuated g/C Ratio      |                                                                                    | 0.18  | 0.18  |       | 0.18  | 0.18  | 0.75  | 0.70  | 0.70  | 0.61 | 0.56  | 0.56  |
| v/c Ratio               |                                                                                    | 0.88  | 0.40  |       | 0.73  | 0.15  | 0.86  | 0.80  | 0.07  | 0.38 | 0.80  | 0.07  |
| Control Delay           |                                                                                    | 103.0 | 9.8   |       | 87.7  | 1.7   | 49.2  | 28.9  | 5.5   | 21.7 | 55.9  | 11.8  |
| Queue Delay             |                                                                                    | 0.0   | 2.3   |       | 78.3  | 0.0   | 0.0   | 47.3  | 0.0   | 0.0  | 1.0   | 0.0   |
| Total Delay             |                                                                                    | 103.0 | 12.1  |       | 166.0 | 1.7   | 49.2  | 76.2  | 5.5   | 21.7 | 56.9  | 11.8  |
| LOS                     |                                                                                    | F     | B     |       | F     | A     | D     | E     | A     | C    | E     | B     |
| Approach Delay          |                                                                                    | 58.1  |       |       | 112.9 |       |       | 70.6  |       |      | 54.3  |       |
| Approach LOS            |                                                                                    | E     |       |       | F     |       |       | E     |       |      | D     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 65.1

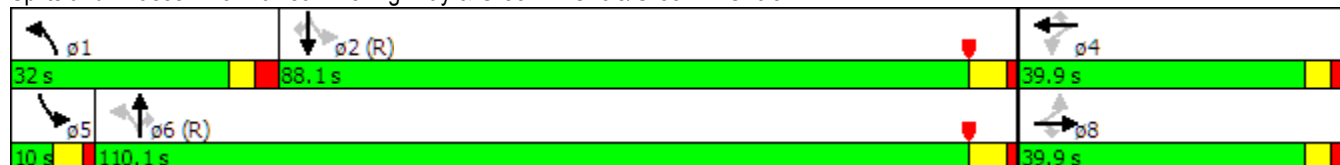
Intersection LOS: E

Intersection Capacity Utilization 87.9%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle



## Lanier Tract DRI

## 10: Dawsonville Highway &amp; Shallowford Rd/Best Buy

no build p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 572                                                                               | 42                                                                                | 29                                                                                | 40                                                                                | 30                                                                                | 8                                                                                 | 44                                                                                  | 1810                                                                                | 126                                                                                 | 8                                                                                   | 1282                                                                                | 511                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | -1%                                                                               |                                                                                   |                                                                                   | 10%                                                                               |                                                                                   |                                                                                     | -4%                                                                                 |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 350                                                                               |                                                                                   | 350                                                                               | 0                                                                                 |                                                                                   | 0                                                                                 | 350                                                                                 |                                                                                     | 150                                                                                 | 265                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 100                                                                               |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             | 0.959                                                                             |                                                                                   |                                                                                   | 0.972                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1723                                                                              | 1740                                                                              | 1623                                                                              | 0                                                                                 | 1754                                                                              | 1534                                                                              | 1841                                                                                | 3682                                                                                | 1647                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             | 0.959                                                                             |                                                                                   |                                                                                   | 0.972                                                                             |                                                                                   | 0.085                                                                               |                                                                                     |                                                                                     | 0.046                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1723                                                                              | 1740                                                                              | 1623                                                                              | 0                                                                                 | 1754                                                                              | 1534                                                                              | 165                                                                                 | 3682                                                                                | 1647                                                                                | 88                                                                                  | 3628                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 106                                                                               |                                                                                   |                                                                                   | 111                                                                               |                                                                                     |                                                                                     | 65                                                                                  |                                                                                     |                                                                                     | 321                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 653                                                                               |                                                                                   |                                                                                   | 178                                                                               |                                                                                   |                                                                                     | 1046                                                                                |                                                                                     |                                                                                     | 778                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 9.9                                                                               |                                                                                   |                                                                                   | 4.9                                                                               |                                                                                   |                                                                                     | 15.8                                                                                |                                                                                     |                                                                                     | 11.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.94                                                                                | 0.94                                                                                | 0.94                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 636                                                                               | 47                                                                                | 32                                                                                | 45                                                                                | 34                                                                                | 9                                                                                 | 47                                                                                  | 1926                                                                                | 134                                                                                 | 9                                                                                   | 1409                                                                                | 562                                                                                 |
| Shared Lane Traffic (%)    | 46%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 343                                                                               | 340                                                                               | 32                                                                                | 0                                                                                 | 79                                                                                | 9                                                                                 | 47                                                                                  | 1926                                                                                | 134                                                                                 | 9                                                                                   | 1409                                                                                | 562                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 0.99                                                                              | 0.99                                                                              | 0.99                                                                              | 1.07                                                                              | 1.07                                                                              | 1.07                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Split                                                                             | NA                                                                                | Perm                                                                              | Split                                                                             | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | Perm                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 3                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 3                                                                                 | 3                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 36.7                                                                              | 36.7                                                                              | 36.7                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                                | 28.8                                                                                | 28.8                                                                                | 30.8                                                                                | 30.8                                                                                | 30.8                                                                                |



# Lanier Tract DRI

## 10: Dawsonville Highway & Shallowford Rd/Best Buy

no build p.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Total Split (s)         | 36.8                                                                              | 36.8                                                                              | 36.8                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                                | 84.3                                                                                | 84.3                                                                                | 73.5                                                                                | 73.5                                                                                | 73.5                                                                                |
| Total Split (%)         | 23.0%                                                                             | 23.0%                                                                             | 23.0%                                                                             | 24.3%                                                                             | 24.3%                                                                             | 24.3%                                                                             | 6.8%                                                                                | 52.7%                                                                               | 52.7%                                                                               | 45.9%                                                                               | 45.9%                                                                               | 45.9%                                                                               |
| Maximum Green (s)       | 30.1                                                                              | 30.1                                                                              | 30.1                                                                              | 33.0                                                                              | 33.0                                                                              | 33.0                                                                              | 5.0                                                                                 | 77.5                                                                                | 77.5                                                                                | 66.7                                                                                | 66.7                                                                                | 66.7                                                                                |
| Yellow Time (s)         | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                 | 4.9                                                                                 | 4.9                                                                                 | 4.9                                                                                 | 4.9                                                                                 | 4.9                                                                                 |
| All-Red Time (s)        | 2.2                                                                               | 2.2                                                                               | 2.2                                                                               | 2.9                                                                               | 2.9                                                                               | 2.9                                                                               | 2.8                                                                                 | 1.9                                                                                 | 1.9                                                                                 | 1.9                                                                                 | 1.9                                                                                 | 1.9                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.7                                                                               | 6.7                                                                               | 6.7                                                                               |                                                                                   | 5.9                                                                               | 5.9                                                                               | 5.8                                                                                 | 6.8                                                                                 | 6.8                                                                                 | 6.8                                                                                 | 6.8                                                                                 | 6.8                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lag                                                                               | Lead                                                                                |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 | Lag                                                                                 |
| Lead-Lag Optimize?      | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                                | C-Min                                                                               | C-Min                                                                               | C-Min                                                                               | C-Min                                                                               | C-Min                                                                               |
| Walk Time (s)           | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                     | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |
| Flash Dont Walk (s)     | 26.0                                                                              | 26.0                                                                              | 26.0                                                                              | 29.0                                                                              | 29.0                                                                              | 29.0                                                                              |                                                                                     | 18.0                                                                                | 18.0                                                                                | 20.0                                                                                | 20.0                                                                                | 20.0                                                                                |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Act Effect Green (s)    | 30.1                                                                              | 30.1                                                                              | 30.1                                                                              |                                                                                   | 12.6                                                                              | 12.6                                                                              | 98.9                                                                                | 97.9                                                                                | 97.9                                                                                | 87.3                                                                                | 87.3                                                                                | 87.3                                                                                |
| Actuated g/C Ratio      | 0.19                                                                              | 0.19                                                                              | 0.19                                                                              |                                                                                   | 0.08                                                                              | 0.08                                                                              | 0.62                                                                                | 0.61                                                                                | 0.61                                                                                | 0.55                                                                                | 0.55                                                                                | 0.55                                                                                |
| v/c Ratio               | 1.06                                                                              | 1.04                                                                              | 0.08                                                                              |                                                                                   | 0.57                                                                              | 0.04                                                                              | 0.27                                                                                | 0.86                                                                                | 0.13                                                                                | 0.19                                                                                | 0.71                                                                                | 0.55                                                                                |
| Control Delay           | 126.3                                                                             | 121.6                                                                             | 0.4                                                                               |                                                                                   | 86.5                                                                              | 0.4                                                                               | 16.6                                                                                | 30.7                                                                                | 7.4                                                                                 | 58.2                                                                                | 54.5                                                                                | 33.0                                                                                |
| Queue Delay             | 1.1                                                                               | 1.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 47.1                                                                                | 0.0                                                                                 | 0.0                                                                                 | 12.5                                                                                | 0.7                                                                                 |
| Total Delay             | 127.5                                                                             | 122.6                                                                             | 0.4                                                                               |                                                                                   | 86.5                                                                              | 0.4                                                                               | 16.6                                                                                | 77.8                                                                                | 7.4                                                                                 | 58.2                                                                                | 66.9                                                                                | 33.7                                                                                |
| LOS                     | F                                                                                 | F                                                                                 | A                                                                                 |                                                                                   | F                                                                                 | A                                                                                 | B                                                                                   | E                                                                                   | A                                                                                   | E                                                                                   | E                                                                                   | C                                                                                   |
| Approach Delay          |                                                                                   | 119.5                                                                             |                                                                                   |                                                                                   | 77.7                                                                              |                                                                                   |                                                                                     | 72.0                                                                                |                                                                                     |                                                                                     | 57.5                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | F                                                                                 |                                                                                   |                                                                                   | E                                                                                 |                                                                                   |                                                                                     | E                                                                                   |                                                                                     |                                                                                     | E                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 91 (57%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.06

Intersection Signal Delay: 73.1

Intersection LOS: E

Intersection Capacity Utilization 87.3%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 10: Dawsonville Highway & Shallowford Rd/Best Buy

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| 10.8 s                                                                              | 73.5 s                                                                              |                                                                                     | 36.8 s                                                                              |                                                                                      | 38.9 s                                                                                |
|  |  |  |                                                                                     |                                                                                      |                                                                                       |
| 84.3 s                                                                              |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |

## Appendix E

### Future Phase One Intersection Analysis

Lanier Tract DRI  
1: Sportsman Club Road & Strickland Drive

phase one a.m.

| Intersection             |        |       |        |      |        |           |
|--------------------------|--------|-------|--------|------|--------|-----------|
| Int Delay, s/veh         | 4.2    |       |        |      |        |           |
|                          |        |       |        |      |        |           |
| Movement                 | WBL    | WBR   |        | NBT  | NBR    | SBL SBT   |
| Vol, veh/h               | 30     | 0     |        | 7    | 11     | 0 25      |
| Conflicting Peds, #/hr   | 0      | 0     |        | 0    | 0      | 0 0       |
| Sign Control             | Stop   | Stop  |        | Free | Free   | Free Free |
| RT Channelized           | -      | None  |        | -    | None   | - None    |
| Storage Length           | 0      | -     |        | -    | -      | - -       |
| Veh in Median Storage, # | 0      | -     |        | 0    | -      | - 0       |
| Grade, %                 | 0      | -     |        | 0    | -      | - 0       |
| Peak Hour Factor         | 50     | 50    |        | 58   | 58     | 64 64     |
| Heavy Vehicles, %        | 2      | 2     |        | 2    | 2      | 2 2       |
| Mvmt Flow                | 60     | 0     |        | 12   | 19     | 0 39      |
|                          |        |       |        |      |        |           |
| Major/Minor              | Minor1 |       | Major1 |      | Major2 |           |
| Conflicting Flow All     | 61     | 22    | 0      | 0    | 31     | 0         |
| Stage 1                  | 22     | -     | -      | -    | -      | -         |
| Stage 2                  | 39     | -     | -      | -    | -      | -         |
| Critical Hdwy            | 6.42   | 6.22  | -      | -    | 4.12   | -         |
| Critical Hdwy Stg 1      | 5.42   | -     | -      | -    | -      | -         |
| Critical Hdwy Stg 2      | 5.42   | -     | -      | -    | -      | -         |
| Follow-up Hdwy           | 3.518  | 3.318 | -      | -    | 2.218  | -         |
| Pot Cap-1 Maneuver       | 945    | 1055  | -      | -    | 1582   | -         |
| Stage 1                  | 1001   | -     | -      | -    | -      | -         |
| Stage 2                  | 983    | -     | -      | -    | -      | -         |
| Platoon blocked, %       |        |       | -      | -    |        | -         |
| Mov Cap-1 Maneuver       | 945    | 1055  | -      | -    | 1582   | -         |
| Mov Cap-2 Maneuver       | 945    | -     | -      | -    | -      | -         |
| Stage 1                  | 1001   | -     | -      | -    | -      | -         |
| Stage 2                  | 983    | -     | -      | -    | -      | -         |
|                          |        |       |        |      |        |           |
| Approach                 | WB     |       | NB     |      | SB     |           |
| HCM Control Delay, s     | 9.1    |       | 0      |      | 0      |           |
| HCM LOS                  | A      |       |        |      |        |           |
|                          |        |       |        |      |        |           |
| Minor Lane/Major Mvmt    | NBT    | NBR   | WBLn1  | SBL  | SBT    |           |
| Capacity (veh/h)         | -      | -     | 945    | 1582 | -      |           |
| HCM Lane V/C Ratio       | -      | -     | 0.063  | -    | -      |           |
| HCM Control Delay (s)    | -      | -     | 9.1    | 0    | -      |           |
| HCM Lane LOS             | -      | -     | A      | A    | -      |           |
| HCM 95th %tile Q(veh)    | -      | -     | 0.2    | 0    | -      |           |

Lanier Tract DRI  
2: GA 53 & Sportsman Club Road

phase one a.m.

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 23   |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Vol, veh/h               | 14   | 1885 | 0    | 5    | 841  | 15   | 0    | 0    | 0    | 41   | 0    | 23   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 86   | 86   | 86   | 84   | 84   | 84   | 92   | 92   | 92   | 70   | 70   | 70   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 16   | 2192 | 0    | 6    | 1001 | 18   | 0    | 0    | 0    | 59   | 0    | 33   |

| Major/Minor          | Major1 |   |   | Major2 |   |   | Minor1 |      |      | Minor2 |      |      |
|----------------------|--------|---|---|--------|---|---|--------|------|------|--------|------|------|
| Conflicting Flow All | 1019   | 0 | 0 | 2192   | 0 | 0 | 2737   | 3255 | 1096 | 2150   | 3246 | 510  |
| Stage 1              | -      | - | - | -      | - | - | 2224   | 2224 | -    | 1022   | 1022 | -    |
| Stage 2              | -      | - | - | -      | - | - | 513    | 1031 | -    | 1128   | 2224 | -    |
| Critical Hdwy        | 4.14   | - | - | 4.14   | - | - | 7.54   | 6.54 | 6.94 | 7.54   | 6.54 | 6.94 |
| Critical Hdwy Stg 1  | -      | - | - | -      | - | - | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    |
| Critical Hdwy Stg 2  | -      | - | - | -      | - | - | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    |
| Follow-up Hdwy       | 2.22   | - | - | 2.22   | - | - | 3.52   | 4.02 | 3.32 | 3.52   | 4.02 | 3.32 |
| Pot Cap-1 Maneuver   | 677    | - | - | 238    | - | - | 10     | 9    | 208  | ~ 27   | 9    | 509  |
| Stage 1              | -      | - | - | -      | - | - | 44     | 79   | -    | 253    | 312  | -    |
| Stage 2              | -      | - | - | -      | - | - | 512    | 309  | -    | 218    | 79   | -    |
| Platoon blocked, %   | -      | - | - | -      | - | - | -      | -    | -    | -      | -    | -    |
| Mov Cap-1 Maneuver   | 677    | - | - | 238    | - | - | 9      | 9    | 208  | ~ 26   | 9    | 509  |
| Mov Cap-2 Maneuver   | -      | - | - | -      | - | - | 9      | 9    | -    | ~ 26   | 9    | -    |
| Stage 1              | -      | - | - | -      | - | - | 43     | 77   | -    | 247    | 304  | -    |
| Stage 2              | -      | - | - | -      | - | - | 467    | 301  | -    | 213    | 77   | -    |

| Approach             | EB  | WB  | NB | SB       |
|----------------------|-----|-----|----|----------|
| HCM Control Delay, s | 0.1 | 0.1 | 0  | \$ 834.4 |
| HCM LOS              |     |     | A  | F        |

| Minor Lane/Major Mvmt | NBLn1 | EBL   | EBT | EBR | WBL   | WBT | WBR | SBLn1    |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|----------|
| Capacity (veh/h)      | -     | 677   | -   | -   | 238   | -   | -   | 39       |
| HCM Lane V/C Ratio    | -     | 0.024 | -   | -   | 0.025 | -   | -   | 2.344    |
| HCM Control Delay (s) | 0     | 10.4  | -   | -   | 20.5  | -   | -   | \$ 834.4 |
| HCM Lane LOS          | A     | B     | -   | -   | C     | -   | -   | F        |
| HCM 95th %tile Q(veh) | -     | 0.1   | -   | -   | 0.1   | -   | -   | 10       |

| Notes                      |                        |                            |                                |
|----------------------------|------------------------|----------------------------|--------------------------------|
| ~: Volume exceeds capacity | \$: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

Lanier Tract DRI  
3: GA 53 & Avonlea Way

phase one a.m.

| Intersection                                                                                                         |        |      |      |        |       |       |        |       |      |        |      |      |
|----------------------------------------------------------------------------------------------------------------------|--------|------|------|--------|-------|-------|--------|-------|------|--------|------|------|
| Int Delay, s/veh                                                                                                     | 9.8    |      |      |        |       |       |        |       |      |        |      |      |
|                                                                                                                      |        |      |      |        |       |       |        |       |      |        |      |      |
| Movement                                                                                                             | EBL    | EBT  | EBR  | WBL    | WBT   | WBR   | NBL    | NBT   | NBR  | SBL    | SBT  | SBR  |
| Vol, veh/h                                                                                                           | 17     | 0    | 79   | 2      | 0     | 13    | 13     | 866   | 2    | 15     | 1867 | 7    |
| Conflicting Peds, #/hr                                                                                               | 0      | 0    | 0    | 0      | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0    |
| Sign Control                                                                                                         | Stop   | Stop | Stop | Stop   | Stop  | Stop  | Free   | Free  | Free | Free   | Free | Free |
| RT Channelized                                                                                                       | -      | -    | None | -      | -     | None  | -      | -     | None | -      | -    | None |
| Storage Length                                                                                                       | 0      | -    | 0    | 0      | -     | 0     | 0      | -     | -    | 0      | -    | 0    |
| Veh in Median Storage, #                                                                                             | -      | 0    | -    | -      | 0     | -     | -      | 0     | -    | -      | 0    | -    |
| Grade, %                                                                                                             | -      | 0    | -    | -      | 0     | -     | -      | 0     | -    | -      | 0    | -    |
| Peak Hour Factor                                                                                                     | 84     | 84   | 84   | 80     | 80    | 80    | 88     | 88    | 88   | 86     | 86   | 86   |
| Heavy Vehicles, %                                                                                                    | 2      | 2    | 2    | 2      | 2     | 2     | 2      | 2     | 2    | 2      | 2    | 2    |
| Mvmt Flow                                                                                                            | 20     | 0    | 94   | 2      | 0     | 16    | 15     | 984   | 2    | 17     | 2171 | 8    |
|                                                                                                                      |        |      |      |        |       |       |        |       |      |        |      |      |
| Major/Minor                                                                                                          | Minor2 |      |      | Minor1 |       |       | Major1 |       |      | Major2 |      |      |
| Conflicting Flow All                                                                                                 | 2728   | 3222 | 1085 | 2135   | 3221  | 493   | 2171   | 0     | 0    | 986    | 0    | 0    |
| Stage 1                                                                                                              | 2206   | 2206 | -    | 1015   | 1015  | -     | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 522    | 1016 | -    | 1120   | 2206  | -     | -      | -     | -    | -      | -    | -    |
| Critical Hdwy                                                                                                        | 7.54   | 6.54 | 6.94 | 7.54   | 6.54  | 6.94  | 4.14   | -     | -    | 4.14   | -    | -    |
| Critical Hdwy Stg 1                                                                                                  | 6.54   | 5.54 | -    | 6.54   | 5.54  | -     | -      | -     | -    | -      | -    | -    |
| Critical Hdwy Stg 2                                                                                                  | 6.54   | 5.54 | -    | 6.54   | 5.54  | -     | -      | -     | -    | -      | -    | -    |
| Follow-up Hdwy                                                                                                       | 3.52   | 4.02 | 3.32 | 3.52   | 4.02  | 3.32  | 2.22   | -     | -    | 2.22   | -    | -    |
| Pot Cap-1 Maneuver                                                                                                   | ~ 10   | 10   | 212  | 28     | 10    | 522   | 242    | -     | -    | 696    | -    | -    |
| Stage 1                                                                                                              | 45     | 81   | -    | 255    | 314   | -     | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 506    | 314  | -    | 220    | 81    | -     | -      | -     | -    | -      | -    | -    |
| Platoon blocked, %                                                                                                   |        |      |      |        |       |       |        | -     | -    |        | -    | -    |
| Mov Cap-1 Maneuver                                                                                                   | ~ 9    | 9    | 212  | 15     | 9     | 522   | 242    | -     | -    | 696    | -    | -    |
| Mov Cap-2 Maneuver                                                                                                   | ~ 9    | 9    | -    | 15     | 9     | -     | -      | -     | -    | -      | -    | -    |
| Stage 1                                                                                                              | 42     | 79   | -    | 239    | 295   | -     | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 460    | 295  | -    | 119    | 79    | -     | -      | -     | -    | -      | -    | -    |
|                                                                                                                      |        |      |      |        |       |       |        |       |      |        |      |      |
| Approach                                                                                                             | EB     |      |      | WB     |       |       | NB     |       |      | SB     |      |      |
| HCM Control Delay, s                                                                                                 | 273.3  |      |      | 48.9   |       |       | 0.3    |       |      | 0.1    |      |      |
| HCM LOS                                                                                                              | F      |      |      | E      |       |       |        |       |      |        |      |      |
|                                                                                                                      |        |      |      |        |       |       |        |       |      |        |      |      |
| Minor Lane/Major Mvmt                                                                                                | NBL    | NBT  | NBR  | EBLn1  | EBLn2 | WBLn1 | WBLn2  | SBL   | SBT  | SBR    |      |      |
| Capacity (veh/h)                                                                                                     | 242    | -    | -    | 9      | 212   | 15    | 522    | 696   | -    | -      |      |      |
| HCM Lane V/C Ratio                                                                                                   | 0.061  | -    | -    | 2.249  | 0.444 | 0.167 | 0.031  | 0.025 | -    | -      |      |      |
| HCM Control Delay (s)                                                                                                | 20.8   | -    | \$   | 1381.4 | 34.9  | 288.1 | 12.1   | 10.3  | -    | -      |      |      |
| HCM Lane LOS                                                                                                         | C      | -    | -    | F      | D     | F     | B      | B     | -    | -      |      |      |
| HCM 95th %tile Q(veh)                                                                                                | 0.2    | -    | -    | 3.5    | 2.1   | 0.5   | 0.1    | 0.1   | -    | -      |      |      |
| Notes                                                                                                                |        |      |      |        |       |       |        |       |      |        |      |      |
| ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |        |      |      |        |       |       |        |       |      |        |      |      |

Lanier Tract DRI  
4: GA 53 & Canterbury Road

phase one a.m.

| Intersection     |      |  |  |  |  |  |  |  |  |  |  |  |
|------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Int Delay, s/veh | 12.4 |  |  |  |  |  |  |  |  |  |  |  |

| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol, veh/h               | 20   | 0    | 105  | 3    | 0    | 2    | 25   | 826  | 3    | 2    | 1994 | 8    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | 0    | -    | 0    | 0    | -    | 0    | 0    | -    | -    | 0    | -    | 0    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 88   | 92   | 88   | 92   | 92   | 92   | 86   | 86   | 92   | 92   | 91   | 91   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 23   | 0    | 119  | 3    | 0    | 2    | 29   | 960  | 3    | 2    | 2191 | 9    |

| Major/Minor          | Minor2 |      |      | Minor1 |      |      | Major1 |   |   | Major2 |   |   |
|----------------------|--------|------|------|--------|------|------|--------|---|---|--------|---|---|
| Conflicting Flow All | 2734   | 3218 | 1096 | 2120   | 3216 | 482  | 2191   | 0 | 0 | 964    | 0 | 0 |
| Stage 1              | 2196   | 2196 | -    | 1020   | 1020 | -    | -      | - | - | -      | - | - |
| Stage 2              | 538    | 1022 | -    | 1100   | 2196 | -    | -      | - | - | -      | - | - |
| Critical Hdwy        | 7.54   | 6.54 | 6.94 | 7.54   | 6.54 | 6.94 | 4.14   | - | - | 4.14   | - | - |
| Critical Hdwy Stg 1  | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    | -      | - | - | -      | - | - |
| Critical Hdwy Stg 2  | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    | -      | - | - | -      | - | - |
| Follow-up Hdwy       | 3.52   | 4.02 | 3.32 | 3.52   | 4.02 | 3.32 | 2.22   | - | - | 2.22   | - | - |
| Pot Cap-1 Maneuver   | ~ 10   | 10   | 208  | 29     | 10   | 530  | 238    | - | - | 710    | - | - |
| Stage 1              | 46     | 82   | -    | 253    | 312  | -    | -      | - | - | -      | - | - |
| Stage 2              | 495    | 312  | -    | 226    | 82   | -    | -      | - | - | -      | - | - |
| Platoon blocked, %   |        |      |      |        |      |      |        | - | - |        | - | - |
| Mov Cap-1 Maneuver   | ~ 9    | 9    | 208  | 11     | 9    | 530  | 238    | - | - | 710    | - | - |
| Mov Cap-2 Maneuver   | ~ 9    | 9    | -    | 11     | 9    | -    | -      | - | - | -      | - | - |
| Stage 1              | 40     | 82   | -    | 222    | 274  | -    | -      | - | - | -      | - | - |
| Stage 2              | 433    | 274  | -    | 96     | 82   | -    | -      | - | - | -      | - | - |

| Approach             | EB    | WB    | NB  | SB |
|----------------------|-------|-------|-----|----|
| HCM Control Delay, s | 277.1 | 266.4 | 0.7 | 0  |
| HCM LOS              | F     | F     |     |    |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1     | EBLn2 | WBLn1    | WBLn2 | SBL   | SBT | SBR |
|-----------------------|-------|-----|-----|-----------|-------|----------|-------|-------|-----|-----|
| Capacity (veh/h)      | 238   | -   | -   | 9         | 208   | 11       | 530   | 710   | -   | -   |
| HCM Lane V/C Ratio    | 0.122 | -   | -   | 2.525     | 0.574 | 0.296    | 0.004 | 0.003 | -   | -   |
| HCM Control Delay (s) | 22.2  | -   | -   | \$ 1504.7 | 43.3  | \$ 436.1 | 11.8  | 10.1  | -   | -   |
| HCM Lane LOS          | C     | -   | -   | F         | E     | F        | B     | B     | -   | -   |
| HCM 95th %tile Q(veh) | 0.4   | -   | -   | 3.9       | 3.1   | 0.7      | 0     | 0     | -   | -   |

| Notes                      |                        |                            |                                |  |  |  |  |  |  |  |
|----------------------------|------------------------|----------------------------|--------------------------------|--|--|--|--|--|--|--|
| ~: Volume exceeds capacity | \$: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |  |  |  |  |  |  |  |

| Intersection                                                                                                         |        |        |        |        |      |      |
|----------------------------------------------------------------------------------------------------------------------|--------|--------|--------|--------|------|------|
| Int Delay, s/veh                                                                                                     | 3.3    |        |        |        |      |      |
| Movement                                                                                                             | EBL    | EBR    | NBL    | NBT    | SBT  | SBR  |
| Vol, veh/h                                                                                                           | 6      | 45     | 30     | 930    | 2288 | 2    |
| Conflicting Peds, #/hr                                                                                               | 0      | 0      | 0      | 0      | 0    | 0    |
| Sign Control                                                                                                         | Stop   | Stop   | Free   | Free   | Free | Free |
| RT Channelized                                                                                                       | -      | Yield  | -      | Yield  | -    | None |
| Storage Length                                                                                                       | 0      | 0      | 200    | -      | -    | 360  |
| Veh in Median Storage, #                                                                                             | 0      | -      | -      | 0      | 0    | -    |
| Grade, %                                                                                                             | 0      | -      | -      | 1      | 0    | -    |
| Peak Hour Factor                                                                                                     | 82     | 82     | 87     | 87     | 89   | 89   |
| Heavy Vehicles, %                                                                                                    | 0      | 0      | 0      | 1      | 0    | 0    |
| Mvmt Flow                                                                                                            | 7      | 55     | 34     | 1069   | 2571 | 2    |
| Major/Minor                                                                                                          | Minor2 | Major1 |        | Major2 |      |      |
| Conflicting Flow All                                                                                                 | 3174   | 1285   | 2571   | 0      | -    | 0    |
| Stage 1                                                                                                              | 2571   | -      | -      | -      | -    | -    |
| Stage 2                                                                                                              | 603    | -      | -      | -      | -    | -    |
| Critical Hdwy                                                                                                        | 6.8    | 6.9    | 4.1    | -      | -    | -    |
| Critical Hdwy Stg 1                                                                                                  | 5.8    | -      | -      | -      | -    | -    |
| Critical Hdwy Stg 2                                                                                                  | 5.8    | -      | -      | -      | -    | -    |
| Follow-up Hdwy                                                                                                       | 3.5    | 3.3    | 2.2    | -      | -    | -    |
| Pot Cap-1 Maneuver                                                                                                   | 8      | 158    | 174    | -      | -    | -    |
| Stage 1                                                                                                              | 45     | -      | -      | -      | -    | -    |
| Stage 2                                                                                                              | 515    | -      | -      | -      | -    | -    |
| Platoon blocked, %                                                                                                   |        |        |        | -      | -    | -    |
| Mov Cap-1 Maneuver                                                                                                   | ~ 6    | 158    | 174    | -      | -    | -    |
| Mov Cap-2 Maneuver                                                                                                   | ~ 6    | -      | -      | -      | -    | -    |
| Stage 1                                                                                                              | 45     | -      | -      | -      | -    | -    |
| Stage 2                                                                                                              | 414    | -      | -      | -      | -    | -    |
| Approach                                                                                                             | EB     | NB     |        | SB     |      |      |
| HCM Control Delay, s                                                                                                 | 179.5  | 1      |        | 0      |      |      |
| HCM LOS                                                                                                              | F      |        |        |        |      |      |
| Minor Lane/Major Mvmt                                                                                                | NBL    | NBT    | EBLn1  | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)                                                                                                     | 174    | -      | 6      | 158    | -    | -    |
| HCM Lane V/C Ratio                                                                                                   | 0.198  | -      | 1.22   | 0.347  | -    | -    |
| HCM Control Delay (s)                                                                                                | 30.7   | \$     | 1230.3 | 39.4   | -    | -    |
| HCM Lane LOS                                                                                                         | D      | -      | F      | E      | -    | -    |
| HCM 95th %tile Q(veh)                                                                                                | 0.7    | -      | 1.7    | 1.4    | -    | -    |
| Notes                                                                                                                |        |        |        |        |      |      |
| ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |        |        |        |        |      |      |

## Lanier Tract DRI

## 5: GA 53 &amp; Lanier Valley Dr/Ahaluna Dr

phase one a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Volume (vph)               | 21                                                                                | 6                                                                                 | 127                                                                               | 92                                                                                | 3                                                                                 | 27                                                                                | 61                                                                                  | 800                                                                                 | 47                                                                                  | 21                                                                                  | 2121                                                                                | 0                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 2%                                                                                |                                                                                   |                                                                                   | -4%                                                                               |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 100                                                                                 |                                                                                     | 0                                                                                   | 140                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.889                                                                             |                                                                                   |                                                                                   | 0.970                                                                             |                                                                                   |                                                                                     | 0.992                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   | 0.993                                                                             |                                                                                   |                                                                                   | 0.964                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1661                                                                              | 0                                                                                 | 0                                                                                 | 1812                                                                              | 0                                                                                 | 1796                                                                                | 3497                                                                                | 0                                                                                   | 1814                                                                                | 3628                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.945                                                                             |                                                                                   |                                                                                   | 0.481                                                                             |                                                                                   | 0.037                                                                               |                                                                                     |                                                                                     | 0.288                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1580                                                                              | 0                                                                                 | 0                                                                                 | 904                                                                               | 0                                                                                 | 70                                                                                  | 3497                                                                                | 0                                                                                   | 550                                                                                 | 3628                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 58                                                                                |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 340                                                                               |                                                                                   |                                                                                   | 322                                                                               |                                                                                   |                                                                                     | 888                                                                                 |                                                                                     |                                                                                     | 1417                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.7                                                                               |                                                                                   |                                                                                   | 7.3                                                                               |                                                                                   |                                                                                     | 13.5                                                                                |                                                                                     |                                                                                     | 21.5                                                                                |                                                                                     |
| Peak Hour Factor           | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.83                                                                              | 0.83                                                                              | 0.83                                                                              | 0.85                                                                                | 0.85                                                                                | 0.85                                                                                | 0.87                                                                                | 0.87                                                                                | 0.87                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 23                                                                                | 7                                                                                 | 140                                                                               | 111                                                                               | 4                                                                                 | 33                                                                                | 72                                                                                  | 941                                                                                 | 55                                                                                  | 24                                                                                  | 2438                                                                                | 0                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 170                                                                               | 0                                                                                 | 0                                                                                 | 148                                                                               | 0                                                                                 | 72                                                                                  | 996                                                                                 | 0                                                                                   | 24                                                                                  | 2438                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 |                                                                                     | 0                                                                                   | 336                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   |                                                                                     | 0                                                                                   | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 8                                                                                 | 8                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 10.6                                                                                | 23.0                                                                                |                                                                                     | 23.0                                                                                | 23.0                                                                                |                                                                                     |



# Lanier Tract DRI

## 5: GA 53 & Lanier Valley Dr/Ahaluna Dr

phase one a.m.

| Lane Group            | EBL   | EBT   | EBR | WBL   | WBT   | WBR | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
|-----------------------|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Total Split (s)       | 30.0  | 30.0  |     | 30.0  | 30.0  |     | 10.6  | 120.0 |     | 109.4 | 109.4 |     |
| Total Split (%)       | 20.0% | 20.0% |     | 20.0% | 20.0% |     | 7.1%  | 80.0% |     | 72.9% | 72.9% |     |
| Maximum Green (s)     | 23.4  | 23.4  |     | 23.4  | 23.4  |     | 5.0   | 113.9 |     | 103.3 | 103.3 |     |
| Yellow Time (s)       | 4.0   | 4.0   |     | 4.0   | 4.0   |     | 3.0   | 4.5   |     | 4.5   | 4.5   |     |
| All-Red Time (s)      | 2.6   | 2.6   |     | 2.6   | 2.6   |     | 2.6   | 1.6   |     | 1.6   | 1.6   |     |
| Lost Time Adjust (s)  |       | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Lost Time (s)   |       | 6.6   |     |       | 6.6   |     | 5.6   | 6.1   |     | 6.1   | 6.1   |     |
| Lead/Lag              |       |       |     |       |       |     | Lead  |       |     | Lag   | Lag   |     |
| Lead-Lag Optimize?    |       |       |     |       |       |     | Yes   |       |     | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode           | None  | None  |     | None  | None  |     | None  | C-Max |     | C-Max | C-Max |     |
| Act Effect Green (s)  |       | 23.4  |     |       | 23.4  |     | 114.4 | 113.9 |     | 103.3 | 103.3 |     |
| Actuated g/C Ratio    |       | 0.16  |     |       | 0.16  |     | 0.76  | 0.76  |     | 0.69  | 0.69  |     |
| v/c Ratio             |       | 0.58  |     |       | 1.01  |     | 0.65  | 0.37  |     | 0.06  | 0.98  |     |
| Control Delay         |       | 46.8  |     |       | 134.1 |     | 57.6  | 3.1   |     | 8.1   | 35.6  |     |
| Queue Delay           |       | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay           |       | 46.8  |     |       | 134.1 |     | 57.6  | 3.1   |     | 8.1   | 35.6  |     |
| LOS                   |       | D     |     |       | F     |     | E     | A     |     | A     | D     |     |
| Approach Delay        |       | 46.8  |     |       | 134.1 |     |       | 6.8   |     |       | 35.3  |     |
| Approach LOS          |       | D     |     |       | F     |     |       | A     |     |       | D     |     |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 26 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.01

Intersection Signal Delay: 31.7

Intersection LOS: C

Intersection Capacity Utilization 90.9%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 5: GA 53 & Lanier Valley Dr/Ahaluna Dr

|        |         |      |      |
|--------|---------|------|------|
|        |         |      |      |
| 120 s  | 30 s    | 30 s | 30 s |
|        |         |      |      |
| 10.6 s | 109.4 s | 30 s | 30 s |

## Lanier Tract DRI

## 6: 53-Dawsonville Hwy &amp; Academy Sports

phase one a.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |  |  |  |  |  |  |  |
| Volume (vph)               | 2                                                                                 | 0                                                                                 | 7                                                                                 | 2                                                                                 | 0                                                                                 | 0                                                                                 | 12                                                                                  | 878                                                                                 | 10                                                                                  | 6                                                                                   | 2269                                                                                | 4                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 4%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 70                                                                                | 200                                                                                 |                                                                                     | 170                                                                                 | 190                                                                                 |                                                                                     | 360                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1805                                                                              | 1900                                                                              | 1615                                                                              | 1769                                                                              | 1862                                                                              | 1862                                                                              | 1796                                                                                | 3556                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 0.031                                                                               |                                                                                     |                                                                                     | 0.277                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1900                                                                              | 1900                                                                              | 1615                                                                              | 1862                                                                              | 1862                                                                              | 1862                                                                              | 59                                                                                  | 3556                                                                                | 1607                                                                                | 526                                                                                 | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 67                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 68                                                                                  |                                                                                     |                                                                                     | 68                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 262                                                                               |                                                                                   |                                                                                   | 246                                                                               |                                                                                   |                                                                                     | 1836                                                                                |                                                                                     |                                                                                     | 685                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.1                                                                               |                                                                                   |                                                                                   | 6.7                                                                               |                                                                                   |                                                                                     | 27.8                                                                                |                                                                                     |                                                                                     | 10.4                                                                                |                                                                                     |
| Peak Hour Factor           | 0.67                                                                              | 0.67                                                                              | 0.67                                                                              | 0.50                                                                              | 0.50                                                                              | 0.50                                                                              | 0.86                                                                                | 0.86                                                                                | 0.86                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 3                                                                                 | 0                                                                                 | 10                                                                                | 4                                                                                 | 0                                                                                 | 0                                                                                 | 14                                                                                  | 1021                                                                                | 12                                                                                  | 7                                                                                   | 2521                                                                                | 4                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 3                                                                                 | 0                                                                                 | 10                                                                                | 4                                                                                 | 0                                                                                 | 0                                                                                 | 14                                                                                  | 1021                                                                                | 12                                                                                  | 7                                                                                   | 2521                                                                                | 4                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              |                                                                                   | Perm                                                                              | Perm                                                                              |                                                                                   | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 2                                                                                   |                                                                                     | 2                                                                                   | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 42.0                                                                              | 42.0                                                                              | 42.0                                                                              | 42.4                                                                              | 42.4                                                                              | 42.4                                                                              | 11.4                                                                                | 30.3                                                                                | 30.3                                                                                | 11.0                                                                                | 29.3                                                                                | 29.3                                                                                |

Synchro 8 Report

Marc R Acampora, PE, LLC

# Lanier Tract DRI

## 6: 53-Dawsonville Hwy & Academy Sports

phase one a.m.

|                         |  |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 42.4                                                                               | 42.4  | 42.4  | 42.4  | 42.4  | 42.4  | 11.4  | 96.6  | 96.6  | 11.0  | 96.2  | 96.2  |
| Total Split (%)         | 28.3%                                                                              | 28.3% | 28.3% | 28.3% | 28.3% | 28.3% | 7.6%  | 64.4% | 64.4% | 7.3%  | 64.1% | 64.1% |
| Maximum Green (s)       | 36.0                                                                               | 36.0  | 36.0  | 36.0  | 36.0  | 36.0  | 5.0   | 90.4  | 90.4  | 5.0   | 90.0  | 90.0  |
| Yellow Time (s)         | 3.4                                                                                | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 4.3   | 4.3   | 3.0   | 4.3   | 4.3   |
| All-Red Time (s)        | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 1.9   | 1.9   | 3.0   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.4                                                                                | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.2   | 6.2   | 6.0   | 6.2   | 6.2   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           | 4.0                                                                                | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 23.0                                                                               | 23.0  | 23.0  | 32.0  | 32.0  | 32.0  |       | 20.0  | 20.0  |       | 19.0  | 19.0  |
| Pedestrian Calls (#/hr) | 0                                                                                  | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    | 6.1                                                                                |       | 6.1   | 6.1   |       |       | 137.2 | 139.9 | 139.9 | 136.1 | 137.4 | 137.4 |
| Actuated g/C Ratio      | 0.04                                                                               |       | 0.04  | 0.04  |       |       | 0.91  | 0.93  | 0.93  | 0.91  | 0.92  | 0.92  |
| v/c Ratio               | 0.04                                                                               |       | 0.08  | 0.05  |       |       | 0.12  | 0.31  | 0.01  | 0.01  | 0.76  | 0.00  |
| Control Delay           | 69.5                                                                               |       | 1.1   | 70.0  |       |       | 6.2   | 1.0   | 0.0   | 0.8   | 4.9   | 0.0   |
| Queue Delay             | 0.0                                                                                |       | 0.0   | 0.0   |       |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay             | 69.5                                                                               |       | 1.1   | 70.0  |       |       | 6.2   | 1.0   | 0.0   | 0.8   | 4.9   | 0.0   |
| LOS                     | E                                                                                  |       | A     | E     |       |       | A     | A     | A     | A     | A     | A     |
| Approach Delay          |                                                                                    |       |       |       |       |       |       | 1.1   |       |       | 4.9   |       |
| Approach LOS            |                                                                                    |       |       |       |       |       |       | A     |       |       | A     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 27 (18%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 145

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.76

Intersection Signal Delay: 3.9

Intersection LOS: A

Intersection Capacity Utilization 86.9%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 6: 53-Dawsonville Hwy & Academy Sports

|                                                                                        |                                                                                            |  |                                                                                          |
|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------|
|  p1 |  p2 (R) |  |  p4 |
| 11 s                                                                                   | 96.6 s                                                                                     |  | 42.4 s                                                                                   |
|  p5 |  p6 (R) |  |  p8 |
| 11.4 s                                                                                 | 96.2 s                                                                                     |  | 42.4 s                                                                                   |

## Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 &amp; McEver Road/McEver

phase one a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |                                                                                   |   |  |  |  |  |  |
| Volume (vph)               | 450                                                                               | 31                                                                                | 378                                                                               | 46                                                                                | 21                                                                                | 22                                                                                | 311                                                                                 | 553                                                                                 | 61                                                                                  | 34                                                                                  | 1341                                                                                | 935                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 1%                                                                                |                                                                                   |                                                                                   | 5%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 180                                                                               |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 310                                                                                 |                                                                                     | 185                                                                                 | 255                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 50                                                                                |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.872                                                                             | 0.850                                                                             |                                                                                   | 0.924                                                                             |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 3484                                                                              | 1566                                                                              | 1527                                                                              | 1760                                                                              | 1712                                                                              | 0                                                                                 | 3484                                                                                | 3487                                                                                | 1575                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   | 0.599                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 3484                                                                              | 1566                                                                              | 1527                                                                              | 1110                                                                              | 1712                                                                              | 0                                                                                 | 3484                                                                                | 3487                                                                                | 1575                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 183                                                                               | 207                                                                               |                                                                                   | 34                                                                                |                                                                                   |                                                                                     |                                                                                     | 184                                                                                 |                                                                                     |                                                                                     | 542                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 45                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 580                                                                               |                                                                                   |                                                                                   | 331                                                                               |                                                                                   |                                                                                     | 921                                                                                 |                                                                                     |                                                                                     | 1624                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 8.8                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                     | 14.0                                                                                |                                                                                     |                                                                                     | 24.6                                                                                |                                                                                     |
| Peak Hour Factor           | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.62                                                                              | 0.62                                                                              | 0.62                                                                              | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 3%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 464                                                                               | 32                                                                                | 390                                                                               | 74                                                                                | 34                                                                                | 35                                                                                | 334                                                                                 | 595                                                                                 | 66                                                                                  | 38                                                                                  | 1490                                                                                | 1039                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   | 47%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 464                                                                               | 215                                                                               | 207                                                                               | 74                                                                                | 69                                                                                | 0                                                                                 | 334                                                                                 | 595                                                                                 | 66                                                                                  | 38                                                                                  | 1490                                                                                | 1039                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 24                                                                                |                                                                                   |                                                                                   | 24                                                                                |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                             | NA                                                                                |                                                                                   | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 8                                                                                 |                                                                                   | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 8                                                                                 | 8                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 13.2                                                                              | 50.2                                                                              | 50.2                                                                              | 11.6                                                                              | 48.2                                                                              |                                                                                   | 13.4                                                                                | 35.6                                                                                | 35.6                                                                                | 12.9                                                                                | 44.6                                                                                | 44.6                                                                                |

# Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 & McEver Road/McEver

phase one a.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Total Split (s)         | 23.0                                                                              | 59.1                                                                              | 59.1                                                                              | 12.1                                                                              | 48.2                                                                              |                                                                                   | 19.0                                                                               | 63.0                                                                                | 63.0                                                                                | 15.8                                                                                | 59.8                                                                                | 59.8                                                                                |
| Total Split (%)         | 15.3%                                                                             | 39.4%                                                                             | 39.4%                                                                             | 8.1%                                                                              | 32.1%                                                                             |                                                                                   | 12.7%                                                                              | 42.0%                                                                               | 42.0%                                                                               | 10.5%                                                                               | 39.9%                                                                               | 39.9%                                                                               |
| Maximum Green (s)       | 15.7                                                                              | 51.8                                                                              | 51.8                                                                              | 5.6                                                                               | 40.9                                                                              |                                                                                   | 11.5                                                                               | 56.4                                                                                | 56.4                                                                                | 8.6                                                                                 | 53.2                                                                                | 53.2                                                                                |
| Yellow Time (s)         | 4.3                                                                               | 4.3                                                                               | 4.3                                                                               | 3.5                                                                               | 4.3                                                                               |                                                                                   | 4.5                                                                                | 4.4                                                                                 | 4.4                                                                                 | 4.2                                                                                 | 4.4                                                                                 | 4.4                                                                                 |
| All-Red Time (s)        | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 2.2                                                                                 | 2.2                                                                                 | 3.0                                                                                 | 2.2                                                                                 | 2.2                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 7.3                                                                               | 7.3                                                                               | 7.3                                                                               | 6.5                                                                               | 7.3                                                                               |                                                                                   | 7.5                                                                                | 6.6                                                                                 | 6.6                                                                                 | 7.2                                                                                 | 6.6                                                                                 | 6.6                                                                                 |
| Lead/Lag                | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lag                                                                               |                                                                                   | Lag                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lead                                                                                | Lead                                                                                |
| Lead-Lag Optimize?      | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               |                                                                                   | Yes                                                                                | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              |                                                                                   | None                                                                               | C-Max                                                                               | C-Max                                                                               | None                                                                                | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    | 4.0                                                                                 | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |
| Flash Dont Walk (s)     |                                                                                   | 38.0                                                                              | 38.0                                                                              |                                                                                   | 36.0                                                                              |                                                                                   |                                                                                    | 25.0                                                                                | 25.0                                                                                |                                                                                     | 34.0                                                                                | 34.0                                                                                |
| Pedestrian Calls (#/hr) |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |
| Act Effect Green (s)    | 16.1                                                                              | 17.6                                                                              | 17.6                                                                              | 14.0                                                                              | 8.9                                                                               |                                                                                   | 11.5                                                                               | 93.2                                                                                | 93.2                                                                                | 8.5                                                                                 | 87.4                                                                                | 87.4                                                                                |
| Actuated g/C Ratio      | 0.11                                                                              | 0.12                                                                              | 0.12                                                                              | 0.09                                                                              | 0.06                                                                              |                                                                                   | 0.08                                                                               | 0.62                                                                                | 0.62                                                                                | 0.06                                                                                | 0.58                                                                                | 0.58                                                                                |
| v/c Ratio               | 1.24                                                                              | 0.62                                                                              | 0.57                                                                              | 0.58                                                                              | 0.52                                                                              |                                                                                   | 1.25                                                                               | 0.27                                                                                | 0.06                                                                                | 0.37                                                                                | 0.70                                                                                | 0.89                                                                                |
| Control Delay           | 183.1                                                                             | 20.5                                                                              | 13.4                                                                              | 70.0                                                                              | 51.0                                                                              |                                                                                   | 197.4                                                                              | 17.7                                                                                | 1.4                                                                                 | 74.8                                                                                | 23.9                                                                                | 17.1                                                                                |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 183.1                                                                             | 20.5                                                                              | 13.4                                                                              | 70.0                                                                              | 51.0                                                                              |                                                                                   | 197.4                                                                              | 17.7                                                                                | 1.4                                                                                 | 74.8                                                                                | 23.9                                                                                | 17.1                                                                                |
| LOS                     | F                                                                                 | C                                                                                 | B                                                                                 | E                                                                                 | D                                                                                 |                                                                                   | F                                                                                  | B                                                                                   | A                                                                                   | E                                                                                   | C                                                                                   | B                                                                                   |
| Approach Delay          |                                                                                   | 104.0                                                                             |                                                                                   |                                                                                   | 60.9                                                                              |                                                                                   |                                                                                    | 77.0                                                                                |                                                                                     |                                                                                     | 21.9                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | F                                                                                 |                                                                                   |                                                                                   | E                                                                                 |                                                                                   |                                                                                    | E                                                                                   |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 19 (13%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.25

Intersection Signal Delay: 50.9

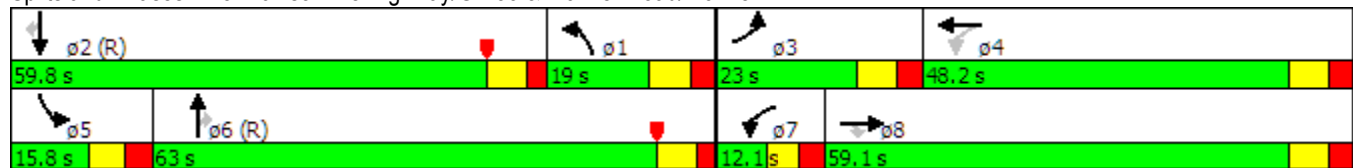
Intersection LOS: D

Intersection Capacity Utilization 88.8%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 8: Dawsonville Highway/GA 53 & McEver Road/McEver



## Lanier Tract DRI

## 9: Dawsonville Highway &amp; Greenhill Circle/Greenhill Circle

phase one a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 74                                                                                | 1                                                                                 | 156                                                                               | 7                                                                                 | 1                                                                                 | 4                                                                                 | 149                                                                                 | 872                                                                                 | 11                                                                                  | 13                                                                                  | 1599                                                                                | 57                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 3%                                                                                |                                                                                   |                                                                                   | 7%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 190                                                                                 |                                                                                     | 190                                                                                 | 185                                                                                 |                                                                                     | 100                                                                                 |
| Storage Lanes              | 0                                                                                 |                                                                                   | 1                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              |                                                                                   | 0.953                                                                             |                                                                                   |                                                                                   | 0.957                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1784                                                                              | 1591                                                                              | 0                                                                                 | 1755                                                                              | 1558                                                                              | 1796                                                                                | 3522                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   | 0.721                                                                             |                                                                                   |                                                                                   | 0.751                                                                             |                                                                                   | 0.074                                                                               |                                                                                     |                                                                                     | 0.283                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1349                                                                              | 1591                                                                              | 0                                                                                 | 1377                                                                              | 1558                                                                              | 140                                                                                 | 3522                                                                                | 1607                                                                                | 538                                                                                 | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 131                                                                               |                                                                                   |                                                                                   | 102                                                                               |                                                                                     |                                                                                     | 57                                                                                  |                                                                                     |                                                                                     | 101                                                                                 |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 288                                                                               |                                                                                   |                                                                                   | 254                                                                               |                                                                                   |                                                                                     | 778                                                                                 |                                                                                     |                                                                                     | 921                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.9                                                                               |                                                                                   |                                                                                   | 6.9                                                                               |                                                                                   |                                                                                     | 11.8                                                                                |                                                                                     |                                                                                     | 14.0                                                                                |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.69                                                                              | 0.69                                                                              | 0.69                                                                              | 0.86                                                                                | 0.86                                                                                | 0.86                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 82                                                                                | 1                                                                                 | 173                                                                               | 10                                                                                | 1                                                                                 | 6                                                                                 | 173                                                                                 | 1014                                                                                | 13                                                                                  | 14                                                                                  | 1738                                                                                | 62                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 83                                                                                | 173                                                                               | 0                                                                                 | 11                                                                                | 6                                                                                 | 173                                                                                 | 1014                                                                                | 13                                                                                  | 14                                                                                  | 1738                                                                                | 62                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.02                                                                              | 1.02                                                                              | 1.02                                                                              | 1.05                                                                              | 1.05                                                                              | 1.05                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              | 23.0                                                                              | 39.9                                                                              | 39.9                                                                              | 39.9                                                                              | 11.0                                                                                | 28.0                                                                                | 28.0                                                                                | 10.0                                                                                | 36.0                                                                                | 36.0                                                                                |

# Lanier Tract DRI

## 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle

phase one a.m.

|                         |  |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 39.9                                                                               | 39.9  | 39.9  | 39.9  | 39.9  | 39.9  | 21.0  | 100.1 | 100.1 | 10.0  | 89.1  | 89.1  |
| Total Split (%)         | 26.6%                                                                              | 26.6% | 26.6% | 26.6% | 26.6% | 26.6% | 14.0% | 66.7% | 66.7% | 6.7%  | 59.4% | 59.4% |
| Maximum Green (s)       | 34.0                                                                               | 34.0  | 34.0  | 34.0  | 34.0  | 34.0  | 15.0  | 94.1  | 94.1  | 5.0   | 83.1  | 83.1  |
| Yellow Time (s)         | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 4.4   | 4.4   | 3.5   | 4.4   | 4.4   |
| All-Red Time (s)        | 2.9                                                                                | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 3.0   | 1.6   | 1.6   | 1.5   | 1.6   | 1.6   |
| Lost Time Adjust (s)    |                                                                                    | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |                                                                                    | 5.9   | 5.9   |       | 5.9   | 5.9   | 6.0   | 6.0   | 6.0   | 5.0   | 6.0   | 6.0   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           |                                                                                    |       |       | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    |       |       | 30.0  | 30.0  | 30.0  |       | 18.0  | 18.0  |       | 26.0  | 26.0  |
| Pedestrian Calls (#/hr) |                                                                                    |       |       | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    |                                                                                    | 14.6  | 14.6  |       | 14.6  | 14.6  | 123.5 | 119.1 | 119.1 | 108.7 | 102.0 | 102.0 |
| Actuated g/C Ratio      |                                                                                    | 0.10  | 0.10  |       | 0.10  | 0.10  | 0.82  | 0.79  | 0.79  | 0.72  | 0.68  | 0.68  |
| v/c Ratio               |                                                                                    | 0.64  | 0.64  |       | 0.08  | 0.02  | 0.60  | 0.36  | 0.01  | 0.03  | 0.71  | 0.05  |
| Control Delay           |                                                                                    | 85.5  | 28.7  |       | 59.9  | 0.2   | 32.6  | 4.6   | 0.0   | 4.2   | 14.7  | 0.9   |
| Queue Delay             |                                                                                    | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.1   | 0.0   |
| Total Delay             |                                                                                    | 85.5  | 28.7  |       | 59.9  | 0.2   | 32.6  | 4.6   | 0.0   | 4.2   | 14.8  | 0.9   |
| LOS                     |                                                                                    | F     | C     |       | E     | A     | C     | A     | A     | A     | B     | A     |
| Approach Delay          |                                                                                    | 47.1  |       |       | 38.8  |       |       | 8.6   |       |       | 14.3  |       |
| Approach LOS            |                                                                                    | D     |       |       | D     |       |       | A     |       |       | B     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 14.9

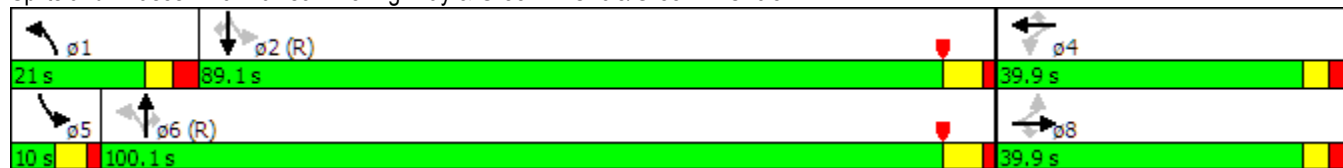
Intersection LOS: B

Intersection Capacity Utilization 78.2%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle



## Lanier Tract DRI

## 10: Dawsonville Highway &amp; Shallowford Rd/Best Buy

phase one a.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 160                                                                               | 2                                                                                 | 9                                                                                 | 2                                                                                 | 4                                                                                 | 3                                                                                 | 11                                                                                  | 847                                                                                 | 14                                                                                  | 1                                                                                   | 1415                                                                                | 386                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | -1%                                                                               |                                                                                   |                                                                                   | 10%                                                                               |                                                                                   |                                                                                     | -4%                                                                                 |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 350                                                                               |                                                                                   | 350                                                                               | 0                                                                                 |                                                                                   | 0                                                                                 | 350                                                                                 |                                                                                     | 150                                                                                 | 265                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 100                                                                               |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             | 0.953                                                                             |                                                                                   |                                                                                   | 0.982                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1723                                                                              | 1729                                                                              | 1623                                                                              | 0                                                                                 | 1773                                                                              | 1534                                                                              | 1841                                                                                | 3646                                                                                | 1647                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             | 0.953                                                                             |                                                                                   |                                                                                   | 0.982                                                                             |                                                                                   | 0.117                                                                               |                                                                                     |                                                                                     | 0.280                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1723                                                                              | 1729                                                                              | 1623                                                                              | 0                                                                                 | 1773                                                                              | 1534                                                                              | 227                                                                                 | 3646                                                                                | 1647                                                                                | 535                                                                                 | 3592                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 113                                                                               |                                                                                   |                                                                                   | 119                                                                               |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     | 220                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 653                                                                               |                                                                                   |                                                                                   | 178                                                                               |                                                                                   |                                                                                     | 957                                                                                 |                                                                                     |                                                                                     | 778                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 9.9                                                                               |                                                                                   |                                                                                   | 4.9                                                                               |                                                                                   |                                                                                     | 14.5                                                                                |                                                                                     |                                                                                     | 11.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.84                                                                              | 0.84                                                                              | 0.84                                                                              | 0.56                                                                              | 0.56                                                                              | 0.56                                                                              | 0.83                                                                                | 0.83                                                                                | 0.83                                                                                | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 190                                                                               | 2                                                                                 | 11                                                                                | 4                                                                                 | 7                                                                                 | 5                                                                                 | 13                                                                                  | 1020                                                                                | 17                                                                                  | 1                                                                                   | 1522                                                                                | 415                                                                                 |
| Shared Lane Traffic (%)    | 49%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 97                                                                                | 95                                                                                | 11                                                                                | 0                                                                                 | 11                                                                                | 5                                                                                 | 13                                                                                  | 1020                                                                                | 17                                                                                  | 1                                                                                   | 1522                                                                                | 415                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 0.99                                                                              | 0.99                                                                              | 0.99                                                                              | 1.07                                                                              | 1.07                                                                              | 1.07                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Split                                                                             | NA                                                                                | Perm                                                                              | Split                                                                             | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | Perm                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 3                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 3                                                                                 | 3                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 36.7                                                                              | 36.7                                                                              | 36.7                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                                | 28.8                                                                                | 28.8                                                                                | 30.8                                                                                | 30.8                                                                                | 30.8                                                                                |



# Lanier Tract DRI

## 10: Dawsonville Highway & Shallowford Rd/Best Buy

phase one a.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Total Split (s)         | 36.7                                                                              | 36.7                                                                              | 36.7                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                               | 74.4                                                                                | 74.4                                                                                | 63.6                                                                                | 63.6                                                                                | 63.6                                                                                |
| Total Split (%)         | 24.5%                                                                             | 24.5%                                                                             | 24.5%                                                                             | 25.9%                                                                             | 25.9%                                                                             | 25.9%                                                                             | 7.2%                                                                               | 49.6%                                                                               | 49.6%                                                                               | 42.4%                                                                               | 42.4%                                                                               | 42.4%                                                                               |
| Maximum Green (s)       | 30.0                                                                              | 30.0                                                                              | 30.0                                                                              | 33.0                                                                              | 33.0                                                                              | 33.0                                                                              | 5.0                                                                                | 67.6                                                                                | 67.6                                                                                | 56.8                                                                                | 56.8                                                                                | 56.8                                                                                |
| Yellow Time (s)         | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 4.9                                                                                 | 4.9                                                                                 | 4.9                                                                                 | 4.9                                                                                 | 4.9                                                                                 |
| All-Red Time (s)        | 2.2                                                                               | 2.2                                                                               | 2.2                                                                               | 2.9                                                                               | 2.9                                                                               | 2.9                                                                               | 2.8                                                                                | 1.9                                                                                 | 1.9                                                                                 | 1.9                                                                                 | 1.9                                                                                 | 1.9                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.7                                                                               | 6.7                                                                               | 6.7                                                                               |                                                                                   | 5.9                                                                               | 5.9                                                                               | 5.8                                                                                | 6.8                                                                                 | 6.8                                                                                 | 6.8                                                                                 | 6.8                                                                                 | 6.8                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lag                                                                               | Lead                                                                               |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 | Lag                                                                                 |
| Lead-Lag Optimize?      | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                                |                                                                                     |                                                                                     | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                               | C-Min                                                                               | C-Min                                                                               | C-Min                                                                               | C-Min                                                                               | C-Min                                                                               |
| Walk Time (s)           | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                    | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |
| Flash Dont Walk (s)     | 26.0                                                                              | 26.0                                                                              | 26.0                                                                              | 29.0                                                                              | 29.0                                                                              | 29.0                                                                              |                                                                                    | 18.0                                                                                | 18.0                                                                                | 20.0                                                                                | 20.0                                                                                | 20.0                                                                                |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Act Effect Green (s)    | 13.8                                                                              | 13.8                                                                              | 13.8                                                                              |                                                                                   | 6.5                                                                               | 6.5                                                                               | 118.3                                                                              | 117.3                                                                               | 117.3                                                                               | 112.5                                                                               | 112.5                                                                               | 112.5                                                                               |
| Actuated g/C Ratio      | 0.09                                                                              | 0.09                                                                              | 0.09                                                                              |                                                                                   | 0.04                                                                              | 0.04                                                                              | 0.79                                                                               | 0.78                                                                                | 0.78                                                                                | 0.75                                                                                | 0.75                                                                                | 0.75                                                                                |
| v/c Ratio               | 0.61                                                                              | 0.60                                                                              | 0.04                                                                              |                                                                                   | 0.14                                                                              | 0.03                                                                              | 0.05                                                                               | 0.36                                                                                | 0.01                                                                                | 0.00                                                                                | 0.56                                                                                | 0.33                                                                                |
| Control Delay           | 81.4                                                                              | 80.4                                                                              | 0.3                                                                               |                                                                                   | 72.5                                                                              | 0.3                                                                               | 6.0                                                                                | 6.3                                                                                 | 0.0                                                                                 | 7.0                                                                                 | 11.2                                                                                | 4.5                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.4                                                                                 | 0.0                                                                                 |
| Total Delay             | 81.4                                                                              | 80.4                                                                              | 0.3                                                                               |                                                                                   | 72.5                                                                              | 0.3                                                                               | 6.0                                                                                | 6.3                                                                                 | 0.0                                                                                 | 7.0                                                                                 | 11.7                                                                                | 4.5                                                                                 |
| LOS                     | F                                                                                 | F                                                                                 | A                                                                                 |                                                                                   | E                                                                                 | A                                                                                 | A                                                                                  | A                                                                                   | A                                                                                   | A                                                                                   | B                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 76.5                                                                              |                                                                                   |                                                                                   | 49.9                                                                              |                                                                                   |                                                                                    | 6.2                                                                                 |                                                                                     |                                                                                     | 10.1                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | E                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 45 (30%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.61

Intersection Signal Delay: 13.3

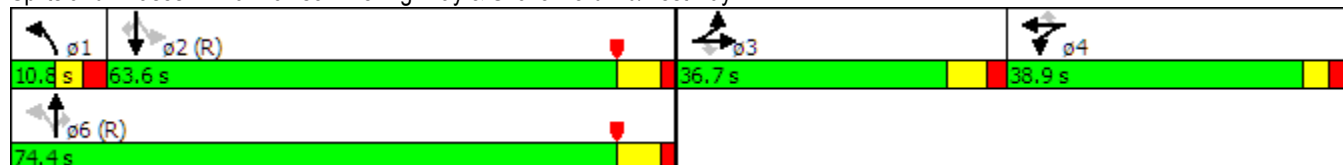
Intersection LOS: B

Intersection Capacity Utilization 63.6%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 10: Dawsonville Highway & Shallowford Rd/Best Buy



Lanier Tract DRI  
1: Sportsman Club Road & Strickland Drive

phase one p.m.

| Intersection             |        |       |        |      |        |           |
|--------------------------|--------|-------|--------|------|--------|-----------|
| Int Delay, s/veh         | 3.2    |       |        |      |        |           |
|                          |        |       |        |      |        |           |
| Movement                 | WBL    | WBR   |        | NBT  | NBR    | SBL SBT   |
| Vol, veh/h               | 24     | 0     |        | 32   | 28     | 0 25      |
| Conflicting Peds, #/hr   | 0      | 0     |        | 0    | 0      | 0 0       |
| Sign Control             | Stop   | Stop  |        | Free | Free   | Free Free |
| RT Channelized           | -      | None  |        | -    | None   | - None    |
| Storage Length           | 0      | -     |        | -    | -      | - -       |
| Veh in Median Storage, # | 0      | -     |        | 0    | -      | - 0       |
| Grade, %                 | 0      | -     |        | 0    | -      | - 0       |
| Peak Hour Factor         | 44     | 44    |        | 86   | 86     | 82 82     |
| Heavy Vehicles, %        | 2      | 2     |        | 2    | 2      | 2 2       |
| Mvmt Flow                | 55     | 0     |        | 37   | 33     | 0 30      |
|                          |        |       |        |      |        |           |
| Major/Minor              | Minor1 |       | Major1 |      | Major2 |           |
| Conflicting Flow All     | 83     | 53    |        | 0    | 0      | 70 0      |
| Stage 1                  | 53     | -     |        | -    | -      | - -       |
| Stage 2                  | 30     | -     |        | -    | -      | - -       |
| Critical Hdwy            | 6.42   | 6.22  |        | -    | -      | 4.12 -    |
| Critical Hdwy Stg 1      | 5.42   | -     |        | -    | -      | - -       |
| Critical Hdwy Stg 2      | 5.42   | -     |        | -    | -      | - -       |
| Follow-up Hdwy           | 3.518  | 3.318 |        | -    | -      | 2.218 -   |
| Pot Cap-1 Maneuver       | 919    | 1014  |        | -    | -      | 1531 -    |
| Stage 1                  | 970    | -     |        | -    | -      | - -       |
| Stage 2                  | 993    | -     |        | -    | -      | - -       |
| Platoon blocked, %       |        |       |        | -    | -      | -         |
| Mov Cap-1 Maneuver       | 919    | 1014  |        | -    | -      | 1531 -    |
| Mov Cap-2 Maneuver       | 919    | -     |        | -    | -      | - -       |
| Stage 1                  | 970    | -     |        | -    | -      | - -       |
| Stage 2                  | 993    | -     |        | -    | -      | - -       |
|                          |        |       |        |      |        |           |
| Approach                 | WB     |       | NB     |      | SB     |           |
| HCM Control Delay, s     | 9.2    |       | 0      |      | 0      |           |
| HCM LOS                  | A      |       |        |      |        |           |
|                          |        |       |        |      |        |           |
| Minor Lane/Major Mvmt    | NBT    | NBR   | WBLn1  | SBL  | SBT    |           |
| Capacity (veh/h)         | -      | -     | 919    | 1531 | -      |           |
| HCM Lane V/C Ratio       | -      | -     | 0.059  | -    | -      |           |
| HCM Control Delay (s)    | -      | -     | 9.2    | 0    | -      |           |
| HCM Lane LOS             | -      | -     | A      | A    | -      |           |
| HCM 95th %tile Q(veh)    | -      | -     | 0.2    | 0    | -      |           |

Lanier Tract DRI  
2: GA 53 & Sportsman Club Road

phase one p.m.

| Intersection                                                                                                         |        |       |      |        |       |      |        |           |      |           |      |      |
|----------------------------------------------------------------------------------------------------------------------|--------|-------|------|--------|-------|------|--------|-----------|------|-----------|------|------|
| Int Delay, s/veh                                                                                                     | 74.4   |       |      |        |       |      |        |           |      |           |      |      |
|                                                                                                                      |        |       |      |        |       |      |        |           |      |           |      |      |
| Movement                                                                                                             | EBL    | EBT   | EBR  | WBL    | WBT   | WBR  | NBL    | NBT       | NBR  | SBL       | SBT  | SBR  |
| Vol, veh/h                                                                                                           | 22     | 1166  | 0    | 26     | 1878  | 34   | 0      | 0         | 0    | 42        | 0    | 23   |
| Conflicting Peds, #/hr                                                                                               | 0      | 0     | 0    | 0      | 0     | 0    | 0      | 0         | 0    | 0         | 0    | 0    |
| Sign Control                                                                                                         | Free   | Free  | Free | Free   | Free  | Free | Stop   | Stop      | Stop | Stop      | Stop | Stop |
| RT Channelized                                                                                                       | -      | -     | None | -      | -     | None | -      | -         | None | -         | -    | None |
| Storage Length                                                                                                       | 0      | -     | -    | 0      | -     | -    | -      | -         | -    | -         | -    | -    |
| Veh in Median Storage, #                                                                                             | -      | 0     | -    | -      | 0     | -    | -      | 0         | -    | -         | 0    | -    |
| Grade, %                                                                                                             | -      | 0     | -    | -      | 0     | -    | -      | 0         | -    | -         | 0    | -    |
| Peak Hour Factor                                                                                                     | 95     | 95    | 95   | 96     | 96    | 96   | 92     | 92        | 92   | 75        | 75   | 75   |
| Heavy Vehicles, %                                                                                                    | 2      | 2     | 2    | 2      | 2     | 2    | 2      | 2         | 2    | 2         | 2    | 2    |
| Mvmt Flow                                                                                                            | 23     | 1227  | 0    | 27     | 1956  | 35   | 0      | 0         | 0    | 56        | 0    | 31   |
|                                                                                                                      |        |       |      |        |       |      |        |           |      |           |      |      |
| Major/Minor                                                                                                          | Major1 |       |      | Major2 |       |      | Minor1 |           |      | Minor2    |      |      |
| Conflicting Flow All                                                                                                 | 1992   | 0     | 0    | 1227   | 0     | 0    | 2306   | 3320      | 614  | 2688      | 3302 | 996  |
| Stage 1                                                                                                              | -      | -     | -    | -      | -     | -    | 1274   | 1274      | -    | 2028      | 2028 | -    |
| Stage 2                                                                                                              | -      | -     | -    | -      | -     | -    | 1032   | 2046      | -    | 660       | 1274 | -    |
| Critical Hdwy                                                                                                        | 4.14   | -     | -    | 4.14   | -     | -    | 7.54   | 6.54      | 6.94 | 7.54      | 6.54 | 6.94 |
| Critical Hdwy Stg 1                                                                                                  | -      | -     | -    | -      | -     | -    | 6.54   | 5.54      | -    | 6.54      | 5.54 | -    |
| Critical Hdwy Stg 2                                                                                                  | -      | -     | -    | -      | -     | -    | 6.54   | 5.54      | -    | 6.54      | 5.54 | -    |
| Follow-up Hdwy                                                                                                       | 2.22   | -     | -    | 2.22   | -     | -    | 3.52   | 4.02      | 3.32 | 3.52      | 4.02 | 3.32 |
| Pot Cap-1 Maneuver                                                                                                   | 285    | -     | -    | 564    | -     | -    | 21     | 8         | 435  | ~ 10      | 8    | 243  |
| Stage 1                                                                                                              | -      | -     | -    | -      | -     | -    | 177    | 236       | -    | 59        | 100  | -    |
| Stage 2                                                                                                              | -      | -     | -    | -      | -     | -    | 249    | 98        | -    | 418       | 236  | -    |
| Platoon blocked, %                                                                                                   |        | -     | -    |        | -     | -    |        |           |      |           |      |      |
| Mov Cap-1 Maneuver                                                                                                   | 285    | -     | -    | 564    | -     | -    | 17     | 7         | 435  | ~ 9       | 7    | 243  |
| Mov Cap-2 Maneuver                                                                                                   | -      | -     | -    | -      | -     | -    | 17     | 7         | -    | ~ 9       | 7    | -    |
| Stage 1                                                                                                              | -      | -     | -    | -      | -     | -    | 163    | 217       | -    | ~ 54      | 95   | -    |
| Stage 2                                                                                                              | -      | -     | -    | -      | -     | -    | 207    | 93        | -    | 384       | 217  | -    |
|                                                                                                                      |        |       |      |        |       |      |        |           |      |           |      |      |
| Approach                                                                                                             | EB     |       |      | WB     |       |      | NB     |           |      | SB        |      |      |
| HCM Control Delay, s                                                                                                 | 0.3    |       |      | 0.2    |       |      | 0      |           |      | \$ 2872.3 |      |      |
| HCM LOS                                                                                                              |        |       |      |        |       |      | A      |           |      | F         |      |      |
|                                                                                                                      |        |       |      |        |       |      |        |           |      |           |      |      |
| Minor Lane/Major Mvmt                                                                                                | NBLn1  | EBL   | EBT  | EBR    | WBL   | WBT  | WBR    | SBLn1     |      |           |      |      |
| Capacity (veh/h)                                                                                                     | -      | 285   | -    | -      | 564   | -    | -      | 14        |      |           |      |      |
| HCM Lane V/C Ratio                                                                                                   | -      | 0.081 | -    | -      | 0.048 | -    | -      | 6.19      |      |           |      |      |
| HCM Control Delay (s)                                                                                                | 0      | 18.7  | -    | -      | 11.7  | -    |        | \$ 2872.3 |      |           |      |      |
| HCM Lane LOS                                                                                                         | A      | C     | -    | -      | B     | -    | -      | F         |      |           |      |      |
| HCM 95th %tile Q(veh)                                                                                                | -      | 0.3   | -    | -      | 0.2   | -    | -      | 11.8      |      |           |      |      |
| Notes                                                                                                                |        |       |      |        |       |      |        |           |      |           |      |      |
| ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |        |       |      |        |       |      |        |           |      |           |      |      |

| Intersection                                                                                                         |        |      |      |          |        |       |        |       |      |        |      |      |
|----------------------------------------------------------------------------------------------------------------------|--------|------|------|----------|--------|-------|--------|-------|------|--------|------|------|
| Int Delay, s/veh                                                                                                     | 4.2    |      |      |          |        |       |        |       |      |        |      |      |
|                                                                                                                      |        |      |      |          |        |       |        |       |      |        |      |      |
| Movement                                                                                                             | EBL    | EBT  | EBR  | WBL      | WBT    | WBR   | NBL    | NBT   | NBR  | SBL    | SBT  | SBR  |
| Vol, veh/h                                                                                                           | 12     | 0    | 52   | 2        | 0      | 11    | 68     | 1858  | 17   | 10     | 1263 | 15   |
| Conflicting Peds, #/hr                                                                                               | 0      | 0    | 0    | 0        | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0    |
| Sign Control                                                                                                         | Stop   | Stop | Stop | Stop     | Stop   | Stop  | Free   | Free  | Free | Free   | Free | Free |
| RT Channelized                                                                                                       | -      | -    | None | -        | -      | None  | -      | -     | None | -      | -    | None |
| Storage Length                                                                                                       | 0      | -    | 0    | 0        | -      | 0     | 0      | -     | -    | 0      | -    | 0    |
| Veh in Median Storage, #                                                                                             | -      | 0    | -    | -        | 0      | -     | -      | 0     | -    | -      | 0    | -    |
| Grade, %                                                                                                             | -      | 0    | -    | -        | 0      | -     | -      | 0     | -    | -      | 0    | -    |
| Peak Hour Factor                                                                                                     | 76     | 76   | 76   | 80       | 80     | 80    | 95     | 95    | 95   | 100    | 100  | 100  |
| Heavy Vehicles, %                                                                                                    | 2      | 2    | 2    | 2        | 2      | 2     | 2      | 2     | 2    | 2      | 2    | 2    |
| Mvmt Flow                                                                                                            | 16     | 0    | 68   | 2        | 0      | 14    | 72     | 1956  | 18   | 10     | 1263 | 15   |
|                                                                                                                      |        |      |      |          |        |       |        |       |      |        |      |      |
| Major/Minor                                                                                                          | Minor2 |      |      | Minor1   |        |       | Major1 |       |      | Major2 |      |      |
| Conflicting Flow All                                                                                                 | 2404   | 3400 | 632  | 2760     | 3391   | 987   | 1263   | 0     | 0    | 1974   | 0    | 0    |
| Stage 1                                                                                                              | 1283   | 1283 | -    | 2108     | 2108   | -     | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 1121   | 2117 | -    | 652      | 1283   | -     | -      | -     | -    | -      | -    | -    |
| Critical Hdwy                                                                                                        | 7.54   | 6.54 | 6.94 | 7.54     | 6.54   | 6.94  | 4.14   | -     | -    | 4.14   | -    | -    |
| Critical Hdwy Stg 1                                                                                                  | 6.54   | 5.54 | -    | 6.54     | 5.54   | -     | -      | -     | -    | -      | -    | -    |
| Critical Hdwy Stg 2                                                                                                  | 6.54   | 5.54 | -    | 6.54     | 5.54   | -     | -      | -     | -    | -      | -    | -    |
| Follow-up Hdwy                                                                                                       | 3.52   | 4.02 | 3.32 | 3.52     | 4.02   | 3.32  | 2.22   | -     | -    | 2.22   | -    | -    |
| Pot Cap-1 Maneuver                                                                                                   | 17     | 7    | 423  | 9        | 7      | 246   | 546    | -     | -    | 290    | -    | -    |
| Stage 1                                                                                                              | 175    | 234  | -    | 52       | 91     | -     | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 220    | 90   | -    | 423      | 234    | -     | -      | -     | -    | -      | -    | -    |
| Platoon blocked, %                                                                                                   |        |      |      |          |        |       |        | -     | -    |        | -    | -    |
| Mov Cap-1 Maneuver                                                                                                   | ~ 14   | 6    | 423  | 7        | 6      | 246   | 546    | -     | -    | 290    | -    | -    |
| Mov Cap-2 Maneuver                                                                                                   | ~ 14   | 6    | -    | 7        | 6      | -     | -      | -     | -    | -      | -    | -    |
| Stage 1                                                                                                              | 152    | 226  | -    | 45       | 79     | -     | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 180    | 78   | -    | 342      | 226    | -     | -      | -     | -    | -      | -    | -    |
|                                                                                                                      |        |      |      |          |        |       |        |       |      |        |      |      |
| Approach                                                                                                             | EB     |      |      | WB       |        |       | NB     |       |      | SB     |      |      |
| HCM Control Delay, s                                                                                                 | 134.8  |      |      | 124.5    |        |       | 0.4    |       |      | 0.1    |      |      |
| HCM LOS                                                                                                              | F      |      |      | F        |        |       |        |       |      |        |      |      |
|                                                                                                                      |        |      |      |          |        |       |        |       |      |        |      |      |
| Minor Lane/Major Mvmt                                                                                                | NBL    | NBT  | NBR  | EBLn1    | EBLn2  | WBLn1 | WBLn2  | SBL   | SBT  | SBR    |      |      |
| Capacity (veh/h)                                                                                                     | 546    | -    | -    | 14       | 423    | 7     | 246    | 290   | -    | -      |      |      |
| HCM Lane V/C Ratio                                                                                                   | 0.131  | -    | -    | 1.128    | 0.162  | 0.357 | 0.056  | 0.034 | -    | -      |      |      |
| HCM Control Delay (s)                                                                                                | 12.6   | -    | -    | \$ 653.3 | 15.1\$ | 696.5 | 20.5   | 17.9  | -    | -      |      |      |
| HCM Lane LOS                                                                                                         | B      | -    | -    | F        | C      | F     | C      | C     | -    | -      |      |      |
| HCM 95th %tile Q(veh)                                                                                                | 0.4    | -    | -    | 2.5      | 0.6    | 0.7   | 0.2    | 0.1   | -    | -      |      |      |
| Notes                                                                                                                |        |      |      |          |        |       |        |       |      |        |      |      |
| ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |        |      |      |          |        |       |        |       |      |        |      |      |

Lanier Tract DRI  
4: Canterbury Road & GA 53

phase one p.m.

| Intersection                                                                                                         |        |      |          |          |           |       |        |       |      |        |      |      |
|----------------------------------------------------------------------------------------------------------------------|--------|------|----------|----------|-----------|-------|--------|-------|------|--------|------|------|
| Int Delay, s/veh                                                                                                     | 3.8    |      |          |          |           |       |        |       |      |        |      |      |
|                                                                                                                      |        |      |          |          |           |       |        |       |      |        |      |      |
| Movement                                                                                                             | EBL    | EBT  | EBR      | WBL      | WBT       | WBR   | NBL    | NBT   | NBR  | SBL    | SBT  | SBR  |
| Vol, veh/h                                                                                                           | 8      | 0    | 31       | 2        | 0         | 2     | 123    | 1908  | 4    | 3      | 1268 | 15   |
| Conflicting Peds, #/hr                                                                                               | 0      | 0    | 0        | 0        | 0         | 0     | 0      | 0     | 0    | 0      | 0    | 0    |
| Sign Control                                                                                                         | Stop   | Stop | Stop     | Stop     | Stop      | Stop  | Free   | Free  | Free | Free   | Free | Free |
| RT Channelized                                                                                                       | -      | -    | None     | -        | -         | None  | -      | -     | None | -      | -    | None |
| Storage Length                                                                                                       | 0      | -    | 0        | 0        | -         | 0     | 0      | -     | -    | 0      | -    | 0    |
| Veh in Median Storage, #                                                                                             | -      | 0    | -        | -        | 0         | -     | -      | 0     | -    | -      | 0    | -    |
| Grade, %                                                                                                             | -      | 0    | -        | -        | 0         | -     | -      | 0     | -    | -      | 0    | -    |
| Peak Hour Factor                                                                                                     | 80     | 80   | 80       | 70       | 70        | 70    | 96     | 96    | 96   | 96     | 96   | 96   |
| Heavy Vehicles, %                                                                                                    | 2      | 2    | 2        | 2        | 2         | 2     | 2      | 2     | 2    | 2      | 2    | 2    |
| Mvmt Flow                                                                                                            | 10     | 0    | 39       | 3        | 0         | 3     | 128    | 1988  | 4    | 3      | 1321 | 16   |
|                                                                                                                      |        |      |          |          |           |       |        |       |      |        |      |      |
| Major/Minor                                                                                                          | Minor2 |      |          | Minor1   |           |       | Major1 |       |      | Major2 |      |      |
| Conflicting Flow All                                                                                                 | 2577   | 3575 | 660      | 2913     | 3573      | 996   | 1321   | 0     | 0    | 1992   | 0    | 0    |
| Stage 1                                                                                                              | 1327   | 1327 | -        | 2246     | 2246      | -     | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 1250   | 2248 | -        | 667      | 1327      | -     | -      | -     | -    | -      | -    | -    |
| Critical Hdwy                                                                                                        | 7.54   | 6.54 | 6.94     | 7.54     | 6.54      | 6.94  | 4.14   | -     | -    | 4.14   | -    | -    |
| Critical Hdwy Stg 1                                                                                                  | 6.54   | 5.54 | -        | 6.54     | 5.54      | -     | -      | -     | -    | -      | -    | -    |
| Critical Hdwy Stg 2                                                                                                  | 6.54   | 5.54 | -        | 6.54     | 5.54      | -     | -      | -     | -    | -      | -    | -    |
| Follow-up Hdwy                                                                                                       | 3.52   | 4.02 | 3.32     | 3.52     | 4.02      | 3.32  | 2.22   | -     | -    | 2.22   | -    | -    |
| Pot Cap-1 Maneuver                                                                                                   | 13     | 6    | 406      | 7        | 6         | 243   | 519    | -     | -    | 285    | -    | -    |
| Stage 1                                                                                                              | 164    | 223  | -        | 43       | 77        | -     | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 183    | 77   | -        | 414      | 223       | -     | -      | -     | -    | -      | -    | -    |
| Platoon blocked, %                                                                                                   |        |      |          |          |           |       |        | -     | -    |        | -    | -    |
| Mov Cap-1 Maneuver                                                                                                   | 10     | 4    | 406      | 5        | 4         | 243   | 519    | -     | -    | 285    | -    | -    |
| Mov Cap-2 Maneuver                                                                                                   | 10     | 4    | -        | 5        | 4         | -     | -      | -     | -    | -      | -    | -    |
| Stage 1                                                                                                              | 124    | 221  | -        | 32       | 58        | -     | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 136    | 58   | -        | 371      | 221       | -     | -      | -     | -    | -      | -    | -    |
|                                                                                                                      |        |      |          |          |           |       |        |       |      |        |      |      |
| Approach                                                                                                             | EB     |      |          | WB       |           |       | NB     |       |      | SB     |      |      |
| HCM Control Delay, s                                                                                                 | 169.2  |      |          | \$ 544.8 |           |       | 0.9    |       |      | 0      |      |      |
| HCM LOS                                                                                                              | F      |      |          | F        |           |       |        |       |      |        |      |      |
|                                                                                                                      |        |      |          |          |           |       |        |       |      |        |      |      |
| Minor Lane/Major Mvmt                                                                                                | NBL    | NBT  | NBR      | EBLn1    | EBLn2     | WBLn1 | WBLn2  | SBL   | SBT  | SBR    |      |      |
| Capacity (veh/h)                                                                                                     | 519    | -    | -        | 10       | 406       | 5     | 243    | 285   | -    | -      |      |      |
| HCM Lane V/C Ratio                                                                                                   | 0.247  | -    | -        | 1        | 0.095     | 0.571 | 0.012  | 0.011 | -    | -      |      |      |
| HCM Control Delay (s)                                                                                                | 14.2   | -    | \$ 767.5 | 14.2     | \$ 1069.5 | 20    | 17.8   | -     | -    |        |      |      |
| HCM Lane LOS                                                                                                         | B      | -    | -        | F        | B         | F     | C      | C     | -    | -      |      |      |
| HCM 95th %tile Q(veh)                                                                                                | 1      | -    | -        | 1.9      | 0.3       | 0.9   | 0      | 0     | -    | -      |      |      |
| Notes                                                                                                                |        |      |          |          |           |       |        |       |      |        |      |      |
| ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |        |      |          |          |           |       |        |       |      |        |      |      |

| Intersection             |        |        |       |        |      |      |
|--------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh         | 0.9    |        |       |        |      |      |
| Movement                 | EBL    | EBR    | NBL   | NBT    | SBT  | SBR  |
| Vol, veh/h               | 1      | 52     | 95    | 2325   | 1629 | 10   |
| Conflicting Peds, #/hr   | 0      | 0      | 0     | 0      | 0    | 0    |
| Sign Control             | Stop   | Stop   | Free  | Free   | Free | Free |
| RT Channelized           | -      | Yield  | -     | Yield  | -    | None |
| Storage Length           | 0      | 0      | 200   | -      | -    | 360  |
| Veh in Median Storage, # | 0      | -      | -     | 0      | 0    | -    |
| Grade, %                 | 0      | -      | -     | 1      | 0    | -    |
| Peak Hour Factor         | 71     | 71     | 99    | 99     | 98   | 98   |
| Heavy Vehicles, %        | 0      | 0      | 0     | 0      | 1    | 0    |
| Mvmt Flow                | 1      | 73     | 96    | 2348   | 1662 | 10   |
| Major/Minor              | Minor2 | Major1 |       | Major2 |      |      |
| Conflicting Flow All     | 3028   | 832    | 1662  | 0      | -    | 0    |
| Stage 1                  | 1662   | -      | -     | -      | -    | -    |
| Stage 2                  | 1366   | -      | -     | -      | -    | -    |
| Critical Hdwy            | 6.8    | 6.9    | 4.1   | -      | -    | -    |
| Critical Hdwy Stg 1      | 5.8    | -      | -     | -      | -    | -    |
| Critical Hdwy Stg 2      | 5.8    | -      | -     | -      | -    | -    |
| Follow-up Hdwy           | 3.5    | 3.3    | 2.2   | -      | -    | -    |
| Pot Cap-1 Maneuver       | 10     | 316    | 393   | -      | -    | -    |
| Stage 1                  | 143    | -      | -     | -      | -    | -    |
| Stage 2                  | 206    | -      | -     | -      | -    | -    |
| Platoon blocked, %       |        |        |       | -      | -    | -    |
| Mov Cap-1 Maneuver       | 8      | 316    | 393   | -      | -    | -    |
| Mov Cap-2 Maneuver       | 8      | -      | -     | -      | -    | -    |
| Stage 1                  | 143    | -      | -     | -      | -    | -    |
| Stage 2                  | 156    | -      | -     | -      | -    | -    |
| Approach                 | EB     | NB     |       | SB     |      |      |
| HCM Control Delay, s     | 29.5   | 0.7    |       | 0      |      |      |
| HCM LOS                  | D      |        |       |        |      |      |
| Minor Lane/Major Mvmt    | NBL    | NBT    | EBLn1 | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)         | 393    | -      | 8     | 316    | -    | -    |
| HCM Lane V/C Ratio       | 0.244  | -      | 0.176 | 0.232  | -    | -    |
| HCM Control Delay (s)    | 17.1   | -      | 534.2 | 19.8   | -    | -    |
| HCM Lane LOS             | C      | -      | F     | C      | -    | -    |
| HCM 95th %tile Q(veh)    | 0.9    | -      | 0.4   | 0.9    | -    | -    |

## Lanier Tract DRI

## 5: GA 53 &amp; Lanier Valley Dr/Ahaluna Dr

phase one p.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Volume (vph)               | 23                                                                                | 1                                                                                 | 106                                                                               | 98                                                                                | 8                                                                                 | 64                                                                                | 198                                                                                 | 1965                                                                                | 114                                                                                 | 31                                                                                  | 1366                                                                                | 3                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 2%                                                                                |                                                                                   |                                                                                   | -4%                                                                               |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 100                                                                                 |                                                                                     | 0                                                                                   | 140                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.890                                                                             |                                                                                   |                                                                                   | 0.949                                                                             |                                                                                   |                                                                                     | 0.992                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   | 0.991                                                                             |                                                                                   |                                                                                   | 0.972                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1659                                                                              | 0                                                                                 | 0                                                                                 | 1788                                                                              | 0                                                                                 | 1796                                                                                | 3563                                                                                | 0                                                                                   | 1814                                                                                | 3592                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.906                                                                             |                                                                                   |                                                                                   | 0.613                                                                             |                                                                                   | 0.117                                                                               |                                                                                     |                                                                                     | 0.049                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1517                                                                              | 0                                                                                 | 0                                                                                 | 1127                                                                              | 0                                                                                 | 221                                                                                 | 3563                                                                                | 0                                                                                   | 94                                                                                  | 3592                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 119                                                                               |                                                                                   |                                                                                   | 17                                                                                |                                                                                   |                                                                                     | 10                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 340                                                                               |                                                                                   |                                                                                   | 322                                                                               |                                                                                   |                                                                                     | 1002                                                                                |                                                                                     |                                                                                     | 1457                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.7                                                                               |                                                                                   |                                                                                   | 7.3                                                                               |                                                                                   |                                                                                     | 15.2                                                                                |                                                                                     |                                                                                     | 22.1                                                                                |                                                                                     |
| Peak Hour Factor           | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 26                                                                                | 1                                                                                 | 119                                                                               | 109                                                                               | 9                                                                                 | 71                                                                                | 206                                                                                 | 2047                                                                                | 119                                                                                 | 32                                                                                  | 1423                                                                                | 3                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 146                                                                               | 0                                                                                 | 0                                                                                 | 189                                                                               | 0                                                                                 | 206                                                                                 | 2166                                                                                | 0                                                                                   | 32                                                                                  | 1426                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 |                                                                                     | 0                                                                                   | 336                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   |                                                                                     | 0                                                                                   | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 8                                                                                 | 8                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 10.6                                                                                | 23.0                                                                                |                                                                                     | 23.0                                                                                | 23.0                                                                                |                                                                                     |

# Lanier Tract DRI

## 5: GA 53 & Lanier Valley Dr/Ahaluna Dr

phase one p.m.

| Lane Group            | EBL   | EBT   | EBR | WBL   | WBT   | WBR | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
|-----------------------|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Total Split (s)       | 37.0  | 37.0  |     | 37.0  | 37.0  |     | 21.2  | 123.0 |     | 101.8 | 101.8 |     |
| Total Split (%)       | 23.1% | 23.1% |     | 23.1% | 23.1% |     | 13.3% | 76.9% |     | 63.6% | 63.6% |     |
| Maximum Green (s)     | 30.4  | 30.4  |     | 30.4  | 30.4  |     | 15.6  | 116.9 |     | 95.7  | 95.7  |     |
| Yellow Time (s)       | 4.0   | 4.0   |     | 4.0   | 4.0   |     | 3.0   | 4.5   |     | 4.5   | 4.5   |     |
| All-Red Time (s)      | 2.6   | 2.6   |     | 2.6   | 2.6   |     | 2.6   | 1.6   |     | 1.6   | 1.6   |     |
| Lost Time Adjust (s)  |       | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Lost Time (s)   |       | 6.6   |     |       | 6.6   |     | 5.6   | 6.1   |     | 6.1   | 6.1   |     |
| Lead/Lag              |       |       |     |       |       |     | Lead  |       |     | Lag   | Lag   |     |
| Lead-Lag Optimize?    |       |       |     |       |       |     | Yes   |       |     | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode           | None  | None  |     | None  | None  |     | None  | C-Max |     | C-Max | C-Max |     |
| Act Effect Green (s)  |       | 27.1  |     |       | 27.1  |     | 120.7 | 120.2 |     | 102.6 | 102.6 |     |
| Actuated g/C Ratio    |       | 0.17  |     |       | 0.17  |     | 0.75  | 0.75  |     | 0.64  | 0.64  |     |
| v/c Ratio             |       | 0.41  |     |       | 0.92  |     | 0.73  | 0.81  |     | 0.53  | 0.62  |     |
| Control Delay         |       | 17.5  |     |       | 104.1 |     | 30.2  | 14.3  |     | 56.7  | 19.5  |     |
| Queue Delay           |       | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay           |       | 17.5  |     |       | 104.1 |     | 30.2  | 14.3  |     | 56.7  | 19.5  |     |
| LOS                   |       | B     |     |       | F     |     | C     | B     |     | E     | B     |     |
| Approach Delay        |       | 17.5  |     |       | 104.1 |     |       | 15.7  |     |       | 20.4  |     |
| Approach LOS          |       | B     |     |       | F     |     |       | B     |     |       | C     |     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 129 (81%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.92

Intersection Signal Delay: 21.4

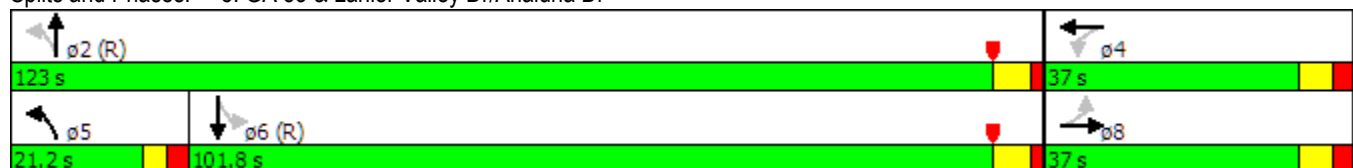
Intersection LOS: C

Intersection Capacity Utilization 94.2%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 5: GA 53 & Lanier Valley Dr/Ahaluna Dr





## Lanier Tract DRI

## 6: 53-Dawsonville Hwy &amp; Academy Sports

phase one p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |  |  |  |  |  |  |  |
| Volume (vph)               | 14                                                                                | 3                                                                                 | 66                                                                                | 130                                                                               | 8                                                                                 | 46                                                                                | 96                                                                                  | 2066                                                                                | 152                                                                                 | 21                                                                                  | 1421                                                                                | 30                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 4%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 70                                                                                | 200                                                                                 |                                                                                     | 170                                                                                 | 190                                                                                 |                                                                                     | 360                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1805                                                                              | 1900                                                                              | 1615                                                                              | 1769                                                                              | 1862                                                                              | 1583                                                                              | 1796                                                                                | 3592                                                                                | 1607                                                                                | 1805                                                                                | 3574                                                                                | 1615                                                                                |
| Flt Permitted              | 0.751                                                                             |                                                                                   |                                                                                   | 0.756                                                                             |                                                                                   |                                                                                   | 0.123                                                                               |                                                                                     |                                                                                     | 0.039                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1427                                                                              | 1900                                                                              | 1615                                                                              | 1408                                                                              | 1862                                                                              | 1583                                                                              | 233                                                                                 | 3592                                                                                | 1607                                                                                | 74                                                                                  | 3574                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 69                                                                                |                                                                                   |                                                                                   | 63                                                                                |                                                                                     |                                                                                     | 66                                                                                  |                                                                                     |                                                                                     | 64                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 262                                                                               |                                                                                   |                                                                                   | 246                                                                               |                                                                                   |                                                                                     | 1836                                                                                |                                                                                     |                                                                                     | 685                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.1                                                                               |                                                                                   |                                                                                   | 6.7                                                                               |                                                                                   |                                                                                     | 27.8                                                                                |                                                                                     |                                                                                     | 10.4                                                                                |                                                                                     |
| Peak Hour Factor           | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.80                                                                              | 0.80                                                                              | 0.80                                                                              | 0.98                                                                                | 0.98                                                                                | 0.98                                                                                | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 15                                                                                | 3                                                                                 | 69                                                                                | 162                                                                               | 10                                                                                | 58                                                                                | 98                                                                                  | 2108                                                                                | 155                                                                                 | 22                                                                                  | 1465                                                                                | 31                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 15                                                                                | 3                                                                                 | 69                                                                                | 162                                                                               | 10                                                                                | 58                                                                                | 98                                                                                  | 2108                                                                                | 155                                                                                 | 22                                                                                  | 1465                                                                                | 31                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 2                                                                                   |                                                                                     | 2                                                                                   | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 42.0                                                                              | 42.0                                                                              | 42.0                                                                              | 42.4                                                                              | 42.4                                                                              | 42.4                                                                              | 11.4                                                                                | 30.3                                                                                | 30.3                                                                                | 11.0                                                                                | 29.3                                                                                | 29.3                                                                                |

# Lanier Tract DRI

## 6: 53-Dawsonville Hwy & Academy Sports

phase one p.m.

| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Total Split (s)         | 42.4  | 42.4  | 42.4  | 42.4  | 42.4  | 42.4  | 16.2  | 106.6 | 106.6 | 11.0  | 101.4 | 101.4 |
| Total Split (%)         | 26.5% | 26.5% | 26.5% | 26.5% | 26.5% | 26.5% | 10.1% | 66.6% | 66.6% | 6.9%  | 63.4% | 63.4% |
| Maximum Green (s)       | 36.0  | 36.0  | 36.0  | 36.0  | 36.0  | 36.0  | 9.8   | 100.4 | 100.4 | 5.0   | 95.2  | 95.2  |
| Yellow Time (s)         | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 4.3   | 4.3   | 3.0   | 4.3   | 4.3   |
| All-Red Time (s)        | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 1.9   | 1.9   | 3.0   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.2   | 6.2   | 6.0   | 6.2   | 6.2   |
| Lead/Lag                |       |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None  | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 23.0  | 23.0  | 23.0  | 32.0  | 32.0  | 32.0  |       | 20.0  | 20.0  |       | 19.0  | 19.0  |
| Pedestrian Calls (#/hr) | 0     | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    | 23.7  | 23.7  | 23.7  | 23.7  | 23.7  | 23.7  | 121.3 | 116.4 | 116.4 | 115.8 | 109.6 | 109.6 |
| Actuated g/C Ratio      | 0.15  | 0.15  | 0.15  | 0.15  | 0.15  | 0.15  | 0.76  | 0.73  | 0.73  | 0.72  | 0.68  | 0.68  |
| v/c Ratio               | 0.07  | 0.01  | 0.23  | 0.78  | 0.04  | 0.20  | 0.39  | 0.81  | 0.13  | 0.19  | 0.60  | 0.03  |
| Control Delay           | 55.8  | 53.3  | 13.0  | 89.1  | 54.6  | 11.7  | 11.7  | 16.7  | 7.3   | 10.0  | 12.0  | 0.0   |
| Queue Delay             | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.1   | 0.0   |
| Total Delay             | 55.8  | 53.3  | 13.0  | 89.1  | 54.6  | 11.7  | 11.7  | 16.7  | 7.3   | 10.0  | 12.1  | 0.0   |
| LOS                     | E     | D     | B     | F     | D     | B     | B     | B     | A     | B     | B     | A     |
| Approach Delay          |       | 21.8  |       |       | 68.1  |       |       | 15.9  |       |       | 11.8  |       |
| Approach LOS            |       | C     |       |       | E     |       |       | B     |       |       | B     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 120 (75%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 145

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 17.4

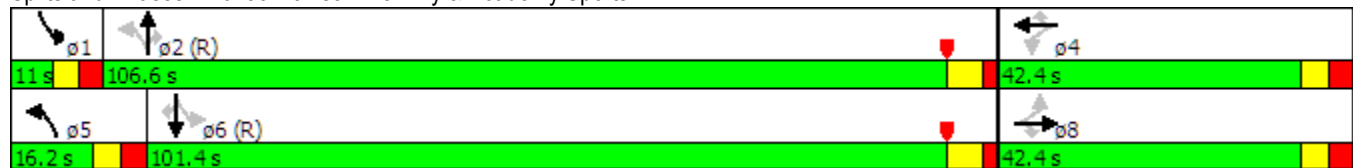
Intersection LOS: B

Intersection Capacity Utilization 90.6%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 6: 53-Dawsonville Hwy & Academy Sports



## Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 &amp; McEver Road/McEver

phase one p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |                                                                                   |   |  |  |  |  |  |
| Volume (vph)               | 967                                                                               | 235                                                                               | 426                                                                               | 96                                                                                | 100                                                                               | 93                                                                                | 478                                                                                 | 1585                                                                                | 51                                                                                  | 71                                                                                  | 1199                                                                                | 562                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 1%                                                                                |                                                                                   |                                                                                   | 5%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 180                                                                               |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 310                                                                                 |                                                                                     | 185                                                                                 | 255                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 50                                                                                |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.951                                                                             | 0.850                                                                             |                                                                                   | 0.928                                                                             |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 3484                                                                              | 1708                                                                              | 1527                                                                              | 1760                                                                              | 1719                                                                              | 0                                                                                 | 3484                                                                                | 3592                                                                                | 1607                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   | 0.468                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 3484                                                                              | 1708                                                                              | 1527                                                                              | 867                                                                               | 1719                                                                              | 0                                                                                 | 3484                                                                                | 3592                                                                                | 1607                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 18                                                                                | 308                                                                               |                                                                                   | 28                                                                                |                                                                                   |                                                                                     |                                                                                     | 172                                                                                 |                                                                                     |                                                                                     | 315                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 580                                                                               |                                                                                   |                                                                                   | 331                                                                               |                                                                                   |                                                                                     | 921                                                                                 |                                                                                     |                                                                                     | 1504                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 8.8                                                                               |                                                                                   |                                                                                   | 9.0                                                                               |                                                                                   |                                                                                     | 14.0                                                                                |                                                                                     |                                                                                     | 22.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.86                                                                              | 0.86                                                                              | 0.86                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 1018                                                                              | 247                                                                               | 448                                                                               | 112                                                                               | 116                                                                               | 108                                                                               | 493                                                                                 | 1634                                                                                | 53                                                                                  | 78                                                                                  | 1318                                                                                | 618                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   | 27%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 1018                                                                              | 368                                                                               | 327                                                                               | 112                                                                               | 224                                                                               | 0                                                                                 | 493                                                                                 | 1634                                                                                | 53                                                                                  | 78                                                                                  | 1318                                                                                | 618                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 24                                                                                |                                                                                   |                                                                                   | 24                                                                                |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                             | NA                                                                                |                                                                                   | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 8                                                                                 |                                                                                   | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 8                                                                                 | 8                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 13.2                                                                              | 50.2                                                                              | 50.2                                                                              | 11.6                                                                              | 48.2                                                                              |                                                                                   | 13.4                                                                                | 35.6                                                                                | 35.6                                                                                | 12.9                                                                                | 44.6                                                                                | 44.6                                                                                |

Lanier Tract DRI

8: Dawsonville Highway/GA 53 & McEver Road/McEver

phase one p.m.

| Lane Group              | EBL   | EBT   | EBR   | WBL  | WBT   | WBR | NBL   | NBT   | NBR   | SBL  | SBT   | SBR   |
|-------------------------|-------|-------|-------|------|-------|-----|-------|-------|-------|------|-------|-------|
| Total Split (s)         | 35.0  | 69.5  | 69.5  | 13.7 | 48.2  |     | 22.0  | 63.8  | 63.8  | 13.0 | 54.8  | 54.8  |
| Total Split (%)         | 21.9% | 43.4% | 43.4% | 8.6% | 30.1% |     | 13.8% | 39.9% | 39.9% | 8.1% | 34.3% | 34.3% |
| Maximum Green (s)       | 27.7  | 62.2  | 62.2  | 7.2  | 40.9  |     | 14.5  | 57.2  | 57.2  | 5.8  | 48.2  | 48.2  |
| Yellow Time (s)         | 4.3   | 4.3   | 4.3   | 3.5  | 4.3   |     | 4.5   | 4.4   | 4.4   | 4.2  | 4.4   | 4.4   |
| All-Red Time (s)        | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 2.2   | 2.2   | 3.0  | 2.2   | 2.2   |
| Lost Time Adjust (s)    | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Lost Time (s)     | 7.3   | 7.3   | 7.3   | 6.5  | 7.3   |     | 7.5   | 6.6   | 6.6   | 7.2  | 6.6   | 6.6   |
| Lead/Lag                | Lead  | Lag   | Lag   | Lead | Lag   |     | Lag   | Lag   | Lag   | Lead | Lead  | Lead  |
| Lead-Lag Optimize?      | Yes   | Yes   | Yes   | Yes  | Yes   |     | Yes   | Yes   | Yes   | Yes  | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   |
| Recall Mode             | None  | None  | None  | None | None  |     | None  | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s)           |       | 4.0   | 4.0   |      | 4.0   |     |       | 4.0   | 4.0   |      | 4.0   | 4.0   |
| Flash Dont Walk (s)     |       | 38.0  | 38.0  |      | 36.0  |     |       | 25.0  | 25.0  |      | 34.0  | 34.0  |
| Pedestrian Calls (#/hr) |       | 0     | 0     |      | 0     |     |       | 0     | 0     |      | 0     | 0     |
| Act Effect Green (s)    | 27.7  | 45.2  | 45.2  | 31.9 | 23.9  |     | 14.5  | 64.6  | 64.6  | 15.4 | 65.2  | 65.2  |
| Actuated g/C Ratio      | 0.17  | 0.28  | 0.28  | 0.20 | 0.15  |     | 0.09  | 0.40  | 0.40  | 0.10 | 0.41  | 0.41  |
| v/c Ratio               | 1.69  | 0.74  | 0.50  | 0.53 | 0.80  |     | 1.57  | 1.13  | 0.07  | 0.45 | 0.90  | 0.73  |
| Control Delay           | 354.5 | 58.6  | 7.9   | 46.9 | 77.3  |     | 314.1 | 120.2 | 0.1   | 67.2 | 67.6  | 40.5  |
| Queue Delay             | 0.0   | 24.1  | 1.7   | 21.7 | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Delay             | 354.5 | 82.7  | 9.6   | 68.5 | 77.3  |     | 314.1 | 120.2 | 0.1   | 67.2 | 67.6  | 40.5  |
| LOS                     | F     | F     | A     | E    | E     |     | F     | F     | A     | E    | E     | D     |
| Approach Delay          |       | 230.3 |       |      | 74.4  |     |       | 161.1 |       |      | 59.3  |       |
| Approach LOS            |       | F     |       |      | E     |     |       | F     |       |      | E     |       |

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 52 (33%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.69

Intersection Signal Delay: 142.6

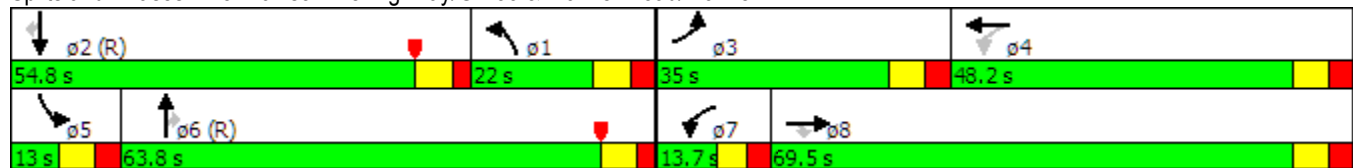
Intersection LOS: F

Intersection Capacity Utilization 110.2%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 8: Dawsonville Highway/GA 53 & McEver Road/McEver



## Lanier Tract DRI

## 9: Dawsonville Highway &amp; Greenhill Circle/Greenhill Circle

phase one p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 146                                                                               | 10                                                                                | 152                                                                               | 66                                                                                | 22                                                                                | 42                                                                                | 274                                                                                 | 2012                                                                                | 77                                                                                  | 44                                                                                  | 1600                                                                                | 59                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 3%                                                                                |                                                                                   |                                                                                   | 7%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 190                                                                                 |                                                                                     | 190                                                                                 | 185                                                                                 |                                                                                     | 100                                                                                 |
| Storage Lanes              | 0                                                                                 |                                                                                   | 1                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              |                                                                                   | 0.955                                                                             |                                                                                   |                                                                                   | 0.964                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1787                                                                              | 1591                                                                              | 0                                                                                 | 1767                                                                              | 1558                                                                              | 1796                                                                                | 3592                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   | 0.591                                                                             |                                                                                   |                                                                                   | 0.482                                                                             |                                                                                   | 0.043                                                                               |                                                                                     |                                                                                     | 0.044                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1106                                                                              | 1591                                                                              | 0                                                                                 | 884                                                                               | 1558                                                                              | 81                                                                                  | 3592                                                                                | 1607                                                                                | 84                                                                                  | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 167                                                                               |                                                                                   |                                                                                   | 95                                                                                |                                                                                     |                                                                                     | 54                                                                                  |                                                                                     |                                                                                     | 95                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 288                                                                               |                                                                                   |                                                                                   | 254                                                                               |                                                                                   |                                                                                     | 778                                                                                 |                                                                                     |                                                                                     | 921                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.9                                                                               |                                                                                   |                                                                                   | 6.9                                                                               |                                                                                   |                                                                                     | 11.8                                                                                |                                                                                     |                                                                                     | 14.0                                                                                |                                                                                     |
| Peak Hour Factor           | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.78                                                                              | 0.78                                                                              | 0.78                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 160                                                                               | 11                                                                                | 167                                                                               | 85                                                                                | 28                                                                                | 54                                                                                | 282                                                                                 | 2074                                                                                | 79                                                                                  | 46                                                                                  | 1684                                                                                | 62                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 171                                                                               | 167                                                                               | 0                                                                                 | 113                                                                               | 54                                                                                | 282                                                                                 | 2074                                                                                | 79                                                                                  | 46                                                                                  | 1684                                                                                | 62                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.02                                                                              | 1.02                                                                              | 1.02                                                                              | 1.05                                                                              | 1.05                                                                              | 1.05                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              | 23.0                                                                              | 39.9                                                                              | 39.9                                                                              | 39.9                                                                              | 11.0                                                                                | 28.0                                                                                | 28.0                                                                                | 10.0                                                                                | 36.0                                                                                | 36.0                                                                                |

# Lanier Tract DRI

## 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle

phase one p.m.

|                         |  |       |       |       |       |       |       |       |       |      |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL  | SBT   | SBR   |
| Total Split (s)         | 39.9                                                                               | 39.9  | 39.9  | 39.9  | 39.9  | 39.9  | 31.0  | 110.1 | 110.1 | 10.0 | 89.1  | 89.1  |
| Total Split (%)         | 24.9%                                                                              | 24.9% | 24.9% | 24.9% | 24.9% | 24.9% | 19.4% | 68.8% | 68.8% | 6.3% | 55.7% | 55.7% |
| Maximum Green (s)       | 34.0                                                                               | 34.0  | 34.0  | 34.0  | 34.0  | 34.0  | 25.0  | 104.1 | 104.1 | 5.0  | 83.1  | 83.1  |
| Yellow Time (s)         | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 4.4   | 4.4   | 3.5  | 4.4   | 4.4   |
| All-Red Time (s)        | 2.9                                                                                | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 3.0   | 1.6   | 1.6   | 1.5  | 1.6   | 1.6   |
| Lost Time Adjust (s)    |                                                                                    | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Lost Time (s)     |                                                                                    | 5.9   | 5.9   |       | 5.9   | 5.9   | 6.0   | 6.0   | 6.0   | 5.0  | 6.0   | 6.0   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes  | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s)           |                                                                                    |       |       | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |      | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    |       |       | 30.0  | 30.0  | 30.0  |       | 18.0  | 18.0  |      | 26.0  | 26.0  |
| Pedestrian Calls (#/hr) |                                                                                    |       |       | 0     | 0     | 0     |       | 0     | 0     |      | 0     | 0     |
| Act Effect Green (s)    |                                                                                    | 28.1  | 28.1  |       | 28.1  | 28.1  | 120.0 | 111.5 | 111.5 | 96.9 | 90.3  | 90.3  |
| Actuated g/C Ratio      |                                                                                    | 0.18  | 0.18  |       | 0.18  | 0.18  | 0.75  | 0.70  | 0.70  | 0.61 | 0.56  | 0.56  |
| v/c Ratio               |                                                                                    | 0.88  | 0.40  |       | 0.73  | 0.15  | 0.90  | 0.83  | 0.07  | 0.41 | 0.83  | 0.07  |
| Control Delay           |                                                                                    | 103.0 | 9.8   |       | 87.7  | 1.7   | 57.3  | 30.1  | 5.4   | 24.1 | 57.7  | 11.5  |
| Queue Delay             |                                                                                    | 0.0   | 5.5   |       | 87.6  | 0.0   | 0.0   | 47.1  | 0.0   | 0.0  | 1.7   | 0.0   |
| Total Delay             |                                                                                    | 103.0 | 15.3  |       | 175.3 | 1.7   | 57.3  | 77.2  | 5.4   | 24.1 | 59.4  | 11.5  |
| LOS                     |                                                                                    | F     | B     |       | F     | A     | E     | E     | A     | C    | E     | B     |
| Approach Delay          |                                                                                    | 59.7  |       |       | 119.2 |       |       | 72.6  |       |      | 56.9  |       |
| Approach LOS            |                                                                                    | E     |       |       | F     |       |       | E     |       |      | E     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 67.3

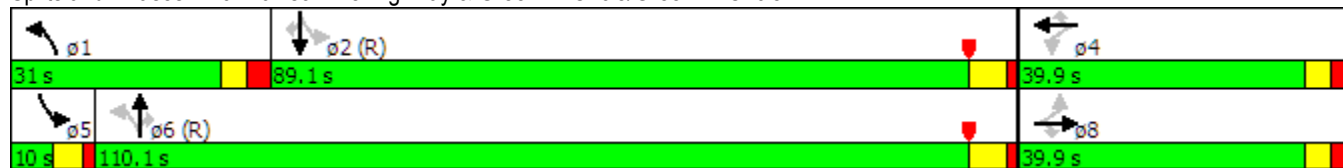
Intersection LOS: E

Intersection Capacity Utilization 89.6%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle



## Lanier Tract DRI

## 10: Dawsonville Highway &amp; Shallowford Rd/Best Buy

phase one p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 590                                                                               | 42                                                                                | 29                                                                                | 40                                                                                | 30                                                                                | 8                                                                                 | 44                                                                                  | 1873                                                                                | 126                                                                                 | 8                                                                                   | 1331                                                                                | 525                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | -1%                                                                               |                                                                                   |                                                                                   | 10%                                                                               |                                                                                   |                                                                                     | -4%                                                                                 |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 350                                                                               |                                                                                   | 350                                                                               | 0                                                                                 |                                                                                   | 0                                                                                 | 350                                                                                 |                                                                                     | 150                                                                                 | 265                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 100                                                                               |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             | 0.958                                                                             |                                                                                   |                                                                                   | 0.972                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1723                                                                              | 1738                                                                              | 1623                                                                              | 0                                                                                 | 1754                                                                              | 1534                                                                              | 1841                                                                                | 3682                                                                                | 1647                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             | 0.958                                                                             |                                                                                   |                                                                                   | 0.972                                                                             |                                                                                   | 0.074                                                                               |                                                                                     |                                                                                     | 0.046                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1723                                                                              | 1738                                                                              | 1623                                                                              | 0                                                                                 | 1754                                                                              | 1534                                                                              | 143                                                                                 | 3682                                                                                | 1647                                                                                | 88                                                                                  | 3628                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 106                                                                               |                                                                                   |                                                                                   | 111                                                                               |                                                                                     |                                                                                     | 65                                                                                  |                                                                                     |                                                                                     | 318                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 653                                                                               |                                                                                   |                                                                                   | 178                                                                               |                                                                                   |                                                                                     | 1046                                                                                |                                                                                     |                                                                                     | 778                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 9.9                                                                               |                                                                                   |                                                                                   | 4.9                                                                               |                                                                                   |                                                                                     | 15.8                                                                                |                                                                                     |                                                                                     | 11.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.94                                                                                | 0.94                                                                                | 0.94                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 656                                                                               | 47                                                                                | 32                                                                                | 45                                                                                | 34                                                                                | 9                                                                                 | 47                                                                                  | 1993                                                                                | 134                                                                                 | 9                                                                                   | 1463                                                                                | 577                                                                                 |
| Shared Lane Traffic (%)    | 47%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 348                                                                               | 355                                                                               | 32                                                                                | 0                                                                                 | 79                                                                                | 9                                                                                 | 47                                                                                  | 1993                                                                                | 134                                                                                 | 9                                                                                   | 1463                                                                                | 577                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 0.99                                                                              | 0.99                                                                              | 0.99                                                                              | 1.07                                                                              | 1.07                                                                              | 1.07                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Split                                                                             | NA                                                                                | Perm                                                                              | Split                                                                             | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | Perm                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 3                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 3                                                                                 | 3                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 36.7                                                                              | 36.7                                                                              | 36.7                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                                | 28.8                                                                                | 28.8                                                                                | 30.8                                                                                | 30.8                                                                                | 30.8                                                                                |

# Lanier Tract DRI

## 10: Dawsonville Highway & Shallowford Rd/Best Buy

phase one p.m.

|                         |  |       |       |       |       |       |      |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL  | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 36.7                                                                               | 36.7  | 36.7  | 38.9  | 38.9  | 38.9  | 10.8 | 84.4  | 84.4  | 73.6  | 73.6  | 73.6  |
| Total Split (%)         | 22.9%                                                                              | 22.9% | 22.9% | 24.3% | 24.3% | 24.3% | 6.8% | 52.8% | 52.8% | 46.0% | 46.0% | 46.0% |
| Maximum Green (s)       | 30.0                                                                               | 30.0  | 30.0  | 33.0  | 33.0  | 33.0  | 5.0  | 77.6  | 77.6  | 66.8  | 66.8  | 66.8  |
| Yellow Time (s)         | 4.5                                                                                | 4.5   | 4.5   | 3.0   | 3.0   | 3.0   | 3.0  | 4.9   | 4.9   | 4.9   | 4.9   | 4.9   |
| All-Red Time (s)        | 2.2                                                                                | 2.2   | 2.2   | 2.9   | 2.9   | 2.9   | 2.8  | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.7                                                                                | 6.7   | 6.7   |       | 5.9   | 5.9   | 5.8  | 6.8   | 6.8   | 6.8   | 6.8   | 6.8   |
| Lead/Lag                | Lead                                                                               | Lead  | Lead  | Lag   | Lag   | Lag   | Lead |       |       | Lag   | Lag   | Lag   |
| Lead-Lag Optimize?      | Yes                                                                                | Yes   | Yes   | Yes   | Yes   | Yes   | Yes  |       |       | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None | C-Min | C-Min | C-Min | C-Min | C-Min |
| Walk Time (s)           | 4.0                                                                                | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 26.0                                                                               | 26.0  | 26.0  | 29.0  | 29.0  | 29.0  |      | 18.0  | 18.0  | 20.0  | 20.0  | 20.0  |
| Pedestrian Calls (#/hr) | 0                                                                                  | 0     | 0     | 0     | 0     | 0     |      | 0     | 0     | 0     | 0     | 0     |
| Act Effect Green (s)    | 30.0                                                                               | 30.0  | 30.0  |       | 12.6  | 12.6  | 99.0 | 98.0  | 98.0  | 87.4  | 87.4  | 87.4  |
| Actuated g/C Ratio      | 0.19                                                                               | 0.19  | 0.19  |       | 0.08  | 0.08  | 0.62 | 0.61  | 0.61  | 0.55  | 0.55  | 0.55  |
| v/c Ratio               | 1.08                                                                               | 1.09  | 0.08  |       | 0.57  | 0.04  | 0.29 | 0.88  | 0.13  | 0.19  | 0.74  | 0.56  |
| Control Delay           | 131.3                                                                              | 135.2 | 0.4   |       | 86.5  | 0.4   | 17.3 | 32.6  | 7.4   | 56.8  | 55.1  | 33.4  |
| Queue Delay             | 1.2                                                                                | 1.3   | 0.0   |       | 0.0   | 0.0   | 0.0  | 46.8  | 0.0   | 0.0   | 23.5  | 0.8   |
| Total Delay             | 132.5                                                                              | 136.5 | 0.4   |       | 86.5  | 0.4   | 17.3 | 79.4  | 7.4   | 56.8  | 78.7  | 34.2  |
| LOS                     | F                                                                                  | F     | A     |       | F     | A     | B    | E     | A     | E     | E     | C     |
| Approach Delay          |                                                                                    | 128.7 |       |       | 77.7  |       |      | 73.6  |       |       | 66.1  |       |
| Approach LOS            |                                                                                    | F     |       |       | E     |       |      | E     |       |       | E     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 91 (57%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.09

Intersection Signal Delay: 78.6

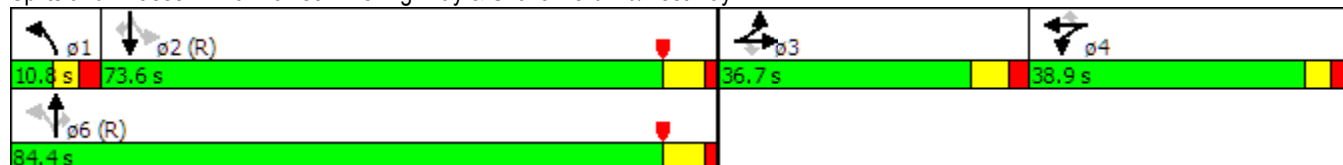
Intersection LOS: E

Intersection Capacity Utilization 89.6%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 10: Dawsonville Highway & Shallowford Rd/Best Buy





## Appendix F

### Future Phase Two Intersection Analysis

Lanier Tract DRI  
1: Sportsman Club Road & Strickland Drive

phase two a.m.

| Intersection             |        |       |        |      |        |      |
|--------------------------|--------|-------|--------|------|--------|------|
| Int Delay, s/veh         | 4.2    |       |        |      |        |      |
|                          |        |       |        |      |        |      |
| Movement                 | WBL    | WBR   | NBT    | NBR  | SBL    | SBT  |
| Vol, veh/h               | 30     | 0     | 7      | 11   | 0      | 25   |
| Conflicting Peds, #/hr   | 0      | 0     | 0      | 0    | 0      | 0    |
| Sign Control             | Stop   | Stop  | Free   | Free | Free   | Free |
| RT Channelized           | -      | None  | -      | None | -      | None |
| Storage Length           | 0      | -     | -      | -    | -      | -    |
| Veh in Median Storage, # | 0      | -     | 0      | -    | -      | 0    |
| Grade, %                 | 0      | -     | 0      | -    | -      | 0    |
| Peak Hour Factor         | 50     | 50    | 58     | 58   | 64     | 64   |
| Heavy Vehicles, %        | 2      | 2     | 2      | 2    | 2      | 2    |
| Mvmt Flow                | 60     | 0     | 12     | 19   | 0      | 39   |
|                          |        |       |        |      |        |      |
| Major/Minor              | Minor1 |       | Major1 |      | Major2 |      |
| Conflicting Flow All     | 61     | 22    | 0      | 0    | 31     | 0    |
| Stage 1                  | 22     | -     | -      | -    | -      | -    |
| Stage 2                  | 39     | -     | -      | -    | -      | -    |
| Critical Hdwy            | 6.42   | 6.22  | -      | -    | 4.12   | -    |
| Critical Hdwy Stg 1      | 5.42   | -     | -      | -    | -      | -    |
| Critical Hdwy Stg 2      | 5.42   | -     | -      | -    | -      | -    |
| Follow-up Hdwy           | 3.518  | 3.318 | -      | -    | 2.218  | -    |
| Pot Cap-1 Maneuver       | 945    | 1055  | -      | -    | 1582   | -    |
| Stage 1                  | 1001   | -     | -      | -    | -      | -    |
| Stage 2                  | 983    | -     | -      | -    | -      | -    |
| Platoon blocked, %       |        |       | -      | -    |        | -    |
| Mov Cap-1 Maneuver       | 945    | 1055  | -      | -    | 1582   | -    |
| Mov Cap-2 Maneuver       | 945    | -     | -      | -    | -      | -    |
| Stage 1                  | 1001   | -     | -      | -    | -      | -    |
| Stage 2                  | 983    | -     | -      | -    | -      | -    |
|                          |        |       |        |      |        |      |
| Approach                 | WB     | NB    |        | SB   |        |      |
| HCM Control Delay, s     | 9.1    | 0     |        | 0    |        |      |
| HCM LOS                  | A      |       |        |      |        |      |
|                          |        |       |        |      |        |      |
| Minor Lane/Major Mvmt    | NBT    | NBR   | WBLn1  | SBL  | SBT    |      |
| Capacity (veh/h)         | -      | -     | 945    | 1582 | -      |      |
| HCM Lane V/C Ratio       | -      | -     | 0.063  | -    | -      |      |
| HCM Control Delay (s)    | -      | -     | 9.1    | 0    | -      |      |
| HCM Lane LOS             | -      | -     | A      | A    | -      |      |
| HCM 95th %tile Q(veh)    | -      | -     | 0.2    | 0    | -      |      |

Lanier Tract DRI  
2: GA 53 & Sportsman Club Road

phase two a.m.

| Intersection               |        |                        |      |                            |       |      |                                |          |      |          |      |      |
|----------------------------|--------|------------------------|------|----------------------------|-------|------|--------------------------------|----------|------|----------|------|------|
| Int Delay, s/veh           | 23.7   |                        |      |                            |       |      |                                |          |      |          |      |      |
|                            |        |                        |      |                            |       |      |                                |          |      |          |      |      |
| Movement                   | EBL    | EBT                    | EBR  | WBL                        | WBT   | WBR  | NBL                            | NBT      | NBR  | SBL      | SBT  | SBR  |
| Vol, veh/h                 | 14     | 1899                   | 0    | 5                          | 850   | 15   | 0                              | 0        | 0    | 41       | 0    | 23   |
| Conflicting Peds, #/hr     | 0      | 0                      | 0    | 0                          | 0     | 0    | 0                              | 0        | 0    | 0        | 0    | 0    |
| Sign Control               | Free   | Free                   | Free | Free                       | Free  | Free | Stop                           | Stop     | Stop | Stop     | Stop | Stop |
| RT Channelized             | -      | -                      | None | -                          | -     | None | -                              | -        | None | -        | -    | None |
| Storage Length             | 0      | -                      | -    | 0                          | -     | -    | -                              | -        | -    | -        | -    | -    |
| Veh in Median Storage, #   | -      | 0                      | -    | -                          | 0     | -    | -                              | 0        | -    | -        | 0    | -    |
| Grade, %                   | -      | 0                      | -    | -                          | 0     | -    | -                              | 0        | -    | -        | 0    | -    |
| Peak Hour Factor           | 86     | 86                     | 86   | 84                         | 84    | 84   | 92                             | 92       | 92   | 70       | 70   | 70   |
| Heavy Vehicles, %          | 2      | 2                      | 2    | 2                          | 2     | 2    | 2                              | 2        | 2    | 2        | 2    | 2    |
| Mvmt Flow                  | 16     | 2208                   | 0    | 6                          | 1012  | 18   | 0                              | 0        | 0    | 59       | 0    | 33   |
|                            |        |                        |      |                            |       |      |                                |          |      |          |      |      |
| Major/Minor                | Major1 |                        |      | Major2                     |       |      | Minor1                         |          |      | Minor2   |      |      |
| Conflicting Flow All       | 1030   | 0                      | 0    | 2208                       | 0     | 0    | 2759                           | 3283     | 1104 | 2170     | 3274 | 515  |
| Stage 1                    | -      | -                      | -    | -                          | -     | -    | 2241                           | 2241     | -    | 1033     | 1033 | -    |
| Stage 2                    | -      | -                      | -    | -                          | -     | -    | 518                            | 1042     | -    | 1137     | 2241 | -    |
| Critical Hdwy              | 4.14   | -                      | -    | 4.14                       | -     | -    | 7.54                           | 6.54     | 6.94 | 7.54     | 6.54 | 6.94 |
| Critical Hdwy Stg 1        | -      | -                      | -    | -                          | -     | -    | 6.54                           | 5.54     | -    | 6.54     | 5.54 | -    |
| Critical Hdwy Stg 2        | -      | -                      | -    | -                          | -     | -    | 6.54                           | 5.54     | -    | 6.54     | 5.54 | -    |
| Follow-up Hdwy             | 2.22   | -                      | -    | 2.22                       | -     | -    | 3.52                           | 4.02     | 3.32 | 3.52     | 4.02 | 3.32 |
| Pot Cap-1 Maneuver         | 670    | -                      | -    | 234                        | -     | -    | 9                              | 9        | 206  | ~ 26     | 9    | 505  |
| Stage 1                    | -      | -                      | -    | -                          | -     | -    | 43                             | 78       | -    | 249      | 308  | -    |
| Stage 2                    | -      | -                      | -    | -                          | -     | -    | 509                            | 305      | -    | 215      | 78   | -    |
| Platoon blocked, %         |        | -                      | -    |                            | -     | -    |                                |          |      |          |      |      |
| Mov Cap-1 Maneuver         | 670    | -                      | -    | 234                        | -     | -    | 8                              | 9        | 206  | ~ 25     | 9    | 505  |
| Mov Cap-2 Maneuver         | -      | -                      | -    | -                          | -     | -    | 8                              | 9        | -    | ~ 25     | 9    | -    |
| Stage 1                    | -      | -                      | -    | -                          | -     | -    | 42                             | 76       | -    | 243      | 300  | -    |
| Stage 2                    | -      | -                      | -    | -                          | -     | -    | 464                            | 297      | -    | 210      | 76   | -    |
|                            |        |                        |      |                            |       |      |                                |          |      |          |      |      |
| Approach                   | EB     |                        |      | WB                         |       |      | NB                             |          |      | SB       |      |      |
| HCM Control Delay, s       | 0.1    |                        |      | 0.1                        |       |      | 0                              |          |      | \$ 866.3 |      |      |
| HCM LOS                    |        |                        |      |                            |       |      | A                              |          |      | F        |      |      |
|                            |        |                        |      |                            |       |      |                                |          |      |          |      |      |
| Minor Lane/Major Mvmt      | NBLn1  | EBL                    | EBT  | EBR                        | WBL   | WBT  | WBR                            | SBLn1    |      |          |      |      |
| Capacity (veh/h)           | -      | 670                    | -    | -                          | 234   | -    | -                              | 38       |      |          |      |      |
| HCM Lane V/C Ratio         | -      | 0.024                  | -    | -                          | 0.025 | -    | -                              | 2.406    |      |          |      |      |
| HCM Control Delay (s)      | 0      | 10.5                   | -    | -                          | 20.8  | -    | -                              | \$ 866.3 |      |          |      |      |
| HCM Lane LOS               | A      | B                      | -    | -                          | C     | -    | -                              | F        |      |          |      |      |
| HCM 95th %tile Q(veh)      | -      | 0.1                    | -    | -                          | 0.1   | -    | -                              | 10.1     |      |          |      |      |
| Notes                      |        |                        |      |                            |       |      |                                |          |      |          |      |      |
| ~: Volume exceeds capacity |        | \$: Delay exceeds 300s |      | +: Computation Not Defined |       |      | *: All major volume in platoon |          |      |          |      |      |

Lanier Tract DRI  
3: GA 53 & Avonlea Way

phase two a.m.

| Intersection                                                                                                         |          |      |      |           |       |          |        |       |      |        |      |      |
|----------------------------------------------------------------------------------------------------------------------|----------|------|------|-----------|-------|----------|--------|-------|------|--------|------|------|
| Int Delay, s/veh                                                                                                     | 11.1     |      |      |           |       |          |        |       |      |        |      |      |
|                                                                                                                      |          |      |      |           |       |          |        |       |      |        |      |      |
| Movement                                                                                                             | EBL      | EBT  | EBR  | WBL       | WBT   | WBR      | NBL    | NBT   | NBR  | SBL    | SBT  | SBR  |
| Vol, veh/h                                                                                                           | 17       | 0    | 79   | 2         | 0     | 13       | 13     | 875   | 2    | 15     | 1881 | 7    |
| Conflicting Peds, #/hr                                                                                               | 0        | 0    | 0    | 0         | 0     | 0        | 0      | 0     | 0    | 0      | 0    | 0    |
| Sign Control                                                                                                         | Stop     | Stop | Stop | Stop      | Stop  | Stop     | Free   | Free  | Free | Free   | Free | Free |
| RT Channelized                                                                                                       | -        | -    | None | -         | -     | None     | -      | -     | None | -      | -    | None |
| Storage Length                                                                                                       | 0        | -    | 0    | 0         | -     | 0        | 0      | -     | -    | 0      | -    | 0    |
| Veh in Median Storage, #                                                                                             | -        | 0    | -    | -         | 0     | -        | -      | 0     | -    | -      | 0    | -    |
| Grade, %                                                                                                             | -        | 0    | -    | -         | 0     | -        | -      | 0     | -    | -      | 0    | -    |
| Peak Hour Factor                                                                                                     | 84       | 84   | 84   | 80        | 80    | 80       | 88     | 88    | 88   | 86     | 86   | 86   |
| Heavy Vehicles, %                                                                                                    | 2        | 2    | 2    | 2         | 2     | 2        | 2      | 2     | 2    | 2      | 2    | 2    |
| Mvmt Flow                                                                                                            | 20       | 0    | 94   | 2         | 0     | 16       | 15     | 994   | 2    | 17     | 2187 | 8    |
|                                                                                                                      |          |      |      |           |       |          |        |       |      |        |      |      |
| Major/Minor                                                                                                          | Minor2   |      |      | Minor1    |       |          | Major1 |       |      | Major2 |      |      |
| Conflicting Flow All                                                                                                 | 2749     | 3248 | 1094 | 2153      | 3247  | 498      | 2187   | 0     | 0    | 997    | 0    | 0    |
| Stage 1                                                                                                              | 2222     | 2222 | -    | 1025      | 1025  | -        | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 527      | 1026 | -    | 1128      | 2222  | -        | -      | -     | -    | -      | -    | -    |
| Critical Hdwy                                                                                                        | 7.54     | 6.54 | 6.94 | 7.54      | 6.54  | 6.94     | 4.14   | -     | -    | 4.14   | -    | -    |
| Critical Hdwy Stg 1                                                                                                  | 6.54     | 5.54 | -    | 6.54      | 5.54  | -        | -      | -     | -    | -      | -    | -    |
| Critical Hdwy Stg 2                                                                                                  | 6.54     | 5.54 | -    | 6.54      | 5.54  | -        | -      | -     | -    | -      | -    | -    |
| Follow-up Hdwy                                                                                                       | 3.52     | 4.02 | 3.32 | 3.52      | 4.02  | 3.32     | 2.22   | -     | -    | 2.22   | -    | -    |
| Pot Cap-1 Maneuver                                                                                                   | ~ 9      | 9    | 209  | 27        | 9     | 518      | 239    | -     | -    | 690    | -    | -    |
| Stage 1                                                                                                              | 44       | 79   | -    | 252       | 311   | -        | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 502      | 310  | -    | 218       | 79    | -        | -      | -     | -    | -      | -    | -    |
| Platoon blocked, %                                                                                                   |          |      |      |           |       |          |        | -     | -    |        | -    | -    |
| Mov Cap-1 Maneuver                                                                                                   | ~ 8      | 8    | 209  | 14        | 8     | 518      | 239    | -     | -    | 690    | -    | -    |
| Mov Cap-2 Maneuver                                                                                                   | ~ 8      | 8    | -    | 14        | 8     | -        | -      | -     | -    | -      | -    | -    |
| Stage 1                                                                                                              | 41       | 77   | -    | 236       | 291   | -        | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 456      | 291  | -    | 117       | 77    | -        | -      | -     | -    | -      | -    | -    |
|                                                                                                                      |          |      |      |           |       |          |        |       |      |        |      |      |
| Approach                                                                                                             | EB       |      |      | WB        |       |          | NB     |       |      | SB     |      |      |
| HCM Control Delay, s                                                                                                 | \$ 311.5 |      |      | 52.1      |       |          | 0.3    |       |      | 0.1    |      |      |
| HCM LOS                                                                                                              | F        |      |      | F         |       |          |        |       |      |        |      |      |
|                                                                                                                      |          |      |      |           |       |          |        |       |      |        |      |      |
| Minor Lane/Major Mvmt                                                                                                | NBL      | NBT  | NBR  | EBLn1     | EBLn2 | WBLn1    | WBLn2  | SBL   | SBT  | SBR    |      |      |
| Capacity (veh/h)                                                                                                     | 239      | -    | -    | 8         | 209   | 14       | 518    | 690   | -    | -      |      |      |
| HCM Lane V/C Ratio                                                                                                   | 0.062    | -    | -    | 2.53      | 0.45  | 0.179    | 0.031  | 0.025 | -    | -      |      |      |
| HCM Control Delay (s)                                                                                                | 21.1     | -    |      | \$ 1593.4 | 35.6  | \$ 311.5 | 12.2   | 10.4  | -    | -      |      |      |
| HCM Lane LOS                                                                                                         | C        | -    | -    | F         | E     | F        | B      | B     | -    | -      |      |      |
| HCM 95th %tile Q(veh)                                                                                                | 0.2      | -    | -    | 3.6       | 2.1   | 0.5      | 0.1    | 0.1   | -    | -      |      |      |
| Notes                                                                                                                |          |      |      |           |       |          |        |       |      |        |      |      |
| ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |          |      |      |           |       |          |        |       |      |        |      |      |

Lanier Tract DRI  
4: GA 53 & Canterbury Road

phase two a.m.

| Intersection                                                                                                         |          |      |      |           |       |           |        |       |      |        |      |      |
|----------------------------------------------------------------------------------------------------------------------|----------|------|------|-----------|-------|-----------|--------|-------|------|--------|------|------|
| Int Delay, s/veh                                                                                                     | 29       |      |      |           |       |           |        |       |      |        |      |      |
|                                                                                                                      |          |      |      |           |       |           |        |       |      |        |      |      |
| Movement                                                                                                             | EBL      | EBT  | EBR  | WBL       | WBT   | WBR       | NBL    | NBT   | NBR  | SBL    | SBT  | SBR  |
| Vol, veh/h                                                                                                           | 20       | 0    | 105  | 29        | 0     | 15        | 25     | 820   | 40   | 30     | 1980 | 8    |
| Conflicting Peds, #/hr                                                                                               | 0        | 0    | 0    | 0         | 0     | 0         | 0      | 0     | 0    | 0      | 0    | 0    |
| Sign Control                                                                                                         | Stop     | Stop | Stop | Stop      | Stop  | Stop      | Free   | Free  | Free | Free   | Free | Free |
| RT Channelized                                                                                                       | -        | -    | None | -         | -     | None      | -      | -     | None | -      | -    | None |
| Storage Length                                                                                                       | 0        | -    | 0    | 0         | -     | 0         | 0      | -     | -    | 0      | -    | 0    |
| Veh in Median Storage, #                                                                                             | -        | 0    | -    | -         | 0     | -         | -      | 0     | -    | -      | 0    | -    |
| Grade, %                                                                                                             | -        | 0    | -    | -         | 0     | -         | -      | 0     | -    | -      | 0    | -    |
| Peak Hour Factor                                                                                                     | 88       | 92   | 88   | 92        | 92    | 92        | 86     | 86    | 92   | 92     | 91   | 91   |
| Heavy Vehicles, %                                                                                                    | 2        | 2    | 2    | 2         | 2     | 2         | 2      | 2     | 2    | 2      | 2    | 2    |
| Mvmt Flow                                                                                                            | 23       | 0    | 119  | 32        | 0     | 16        | 29     | 953   | 43   | 33     | 2176 | 9    |
|                                                                                                                      |          |      |      |           |       |           |        |       |      |        |      |      |
| Major/Minor                                                                                                          | Minor2   |      |      | Minor1    |       |           | Major1 |       |      | Major2 |      |      |
| Conflicting Flow All                                                                                                 | 2776     | 3296 | 1088 | 2186      | 3274  | 498       | 2176   | 0     | 0    | 997    | 0    | 0    |
| Stage 1                                                                                                              | 2241     | 2241 | -    | 1033      | 1033  | -         | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 535      | 1055 | -    | 1153      | 2241  | -         | -      | -     | -    | -      | -    | -    |
| Critical Hdwy                                                                                                        | 7.54     | 6.54 | 6.94 | 7.54      | 6.54  | 6.94      | 4.14   | -     | -    | 4.14   | -    | -    |
| Critical Hdwy Stg 1                                                                                                  | 6.54     | 5.54 | -    | 6.54      | 5.54  | -         | -      | -     | -    | -      | -    | -    |
| Critical Hdwy Stg 2                                                                                                  | 6.54     | 5.54 | -    | 6.54      | 5.54  | -         | -      | -     | -    | -      | -    | -    |
| Follow-up Hdwy                                                                                                       | 3.52     | 4.02 | 3.32 | 3.52      | 4.02  | 3.32      | 2.22   | -     | -    | 2.22   | -    | -    |
| Pot Cap-1 Maneuver                                                                                                   | ~ 9      | 8    | 211  | ~ 25      | 9     | 518       | 241    | -     | -    | 690    | -    | -    |
| Stage 1                                                                                                              | 43       | 78   | -    | 249       | 308   | -         | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 497      | 301  | -    | 210       | 78    | -         | -      | -     | -    | -      | -    | -    |
| Platoon blocked, %                                                                                                   |          |      |      |           |       |           |        | -     | -    |        | -    | -    |
| Mov Cap-1 Maneuver                                                                                                   | ~ 8      | 7    | 211  | ~ 10      | 8     | 518       | 241    | -     | -    | 690    | -    | -    |
| Mov Cap-2 Maneuver                                                                                                   | ~ 8      | 7    | -    | ~ 10      | 8     | -         | -      | -     | -    | -      | -    | -    |
| Stage 1                                                                                                              | 38       | 74   | -    | 219       | 271   | -         | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 423      | 265  | -    | 87        | 74    | -         | -      | -     | -    | -      | -    | -    |
|                                                                                                                      |          |      |      |           |       |           |        |       |      |        |      |      |
| Approach                                                                                                             | EB       |      |      | WB        |       |           | NB     |       |      | SB     |      |      |
| HCM Control Delay, s                                                                                                 | \$ 312.8 |      |      | \$ 1132.9 |       |           | 0.6    |       |      | 0.2    |      |      |
| HCM LOS                                                                                                              | F        |      |      | F         |       |           |        |       |      |        |      |      |
|                                                                                                                      |          |      |      |           |       |           |        |       |      |        |      |      |
| Minor Lane/Major Mvmt                                                                                                | NBL      | NBT  | NBR  | EBLn1     | EBLn2 | WBLn1     | WBLn2  | SBL   | SBT  | SBR    |      |      |
| Capacity (veh/h)                                                                                                     | 241      | -    | -    | 8         | 211   | 10        | 518    | 690   | -    | -      |      |      |
| HCM Lane V/C Ratio                                                                                                   | 0.121    | -    | -    | 2.841     | 0.565 | 3.152     | 0.031  | 0.047 | -    | -      |      |      |
| HCM Control Delay (s)                                                                                                | 22       | -    |      | \$ 1733.4 | 42.2  | \$ 1712.5 | 12.2   | 10.5  | -    | -      |      |      |
| HCM Lane LOS                                                                                                         | C        | -    | -    | F         | E     | F         | B      | B     | -    | -      |      |      |
| HCM 95th %tile Q(veh)                                                                                                | 0.4      | -    | -    | 4         | 3.1   | 5         | 0.1    | 0.1   | -    | -      |      |      |
| Notes                                                                                                                |          |      |      |           |       |           |        |       |      |        |      |      |
| ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |          |      |      |           |       |           |        |       |      |        |      |      |

| Intersection                                                                                                         |        |        |        |        |      |      |
|----------------------------------------------------------------------------------------------------------------------|--------|--------|--------|--------|------|------|
| Int Delay, s/veh                                                                                                     | 3.3    |        |        |        |      |      |
| Movement                                                                                                             | EBL    | EBR    | NBL    | NBT    | SBT  | SBR  |
| Vol, veh/h                                                                                                           | 6      | 45     | 30     | 961    | 2306 | 2    |
| Conflicting Peds, #/hr                                                                                               | 0      | 0      | 0      | 0      | 0    | 0    |
| Sign Control                                                                                                         | Stop   | Stop   | Free   | Free   | Free | Free |
| RT Channelized                                                                                                       | -      | Yield  | -      | Yield  | -    | None |
| Storage Length                                                                                                       | 0      | 0      | 200    | -      | -    | 360  |
| Veh in Median Storage, #                                                                                             | 0      | -      | -      | 0      | 0    | -    |
| Grade, %                                                                                                             | 0      | -      | -      | 1      | 0    | -    |
| Peak Hour Factor                                                                                                     | 82     | 82     | 87     | 87     | 89   | 89   |
| Heavy Vehicles, %                                                                                                    | 0      | 0      | 0      | 1      | 0    | 0    |
| Mvmt Flow                                                                                                            | 7      | 55     | 34     | 1105   | 2591 | 2    |
| Major/Minor                                                                                                          | Minor2 | Major1 |        | Major2 |      |      |
| Conflicting Flow All                                                                                                 | 3212   | 1296   | 2591   | 0      | -    | 0    |
| Stage 1                                                                                                              | 2591   | -      | -      | -      | -    | -    |
| Stage 2                                                                                                              | 621    | -      | -      | -      | -    | -    |
| Critical Hdwy                                                                                                        | 6.8    | 6.9    | 4.1    | -      | -    | -    |
| Critical Hdwy Stg 1                                                                                                  | 5.8    | -      | -      | -      | -    | -    |
| Critical Hdwy Stg 2                                                                                                  | 5.8    | -      | -      | -      | -    | -    |
| Follow-up Hdwy                                                                                                       | 3.5    | 3.3    | 2.2    | -      | -    | -    |
| Pot Cap-1 Maneuver                                                                                                   | 8      | 155    | 170    | -      | -    | -    |
| Stage 1                                                                                                              | 43     | -      | -      | -      | -    | -    |
| Stage 2                                                                                                              | 504    | -      | -      | -      | -    | -    |
| Platoon blocked, %                                                                                                   |        |        |        | -      | -    | -    |
| Mov Cap-1 Maneuver                                                                                                   | ~ 6    | 155    | 170    | -      | -    | -    |
| Mov Cap-2 Maneuver                                                                                                   | ~ 6    | -      | -      | -      | -    | -    |
| Stage 1                                                                                                              | 43     | -      | -      | -      | -    | -    |
| Stage 2                                                                                                              | 403    | -      | -      | -      | -    | -    |
| Approach                                                                                                             | EB     | NB     |        | SB     |      |      |
| HCM Control Delay, s                                                                                                 | 180.4  | 1      |        | 0      |      |      |
| HCM LOS                                                                                                              | F      |        |        |        |      |      |
| Minor Lane/Major Mvmt                                                                                                | NBL    | NBT    | EBLn1  | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)                                                                                                     | 170    | -      | 6      | 155    | -    | -    |
| HCM Lane V/C Ratio                                                                                                   | 0.203  | -      | 1.22   | 0.354  | -    | -    |
| HCM Control Delay (s)                                                                                                | 31.5   | \$     | 1230.3 | 40.4   | -    | -    |
| HCM Lane LOS                                                                                                         | D      | -      | F      | E      | -    | -    |
| HCM 95th %tile Q(veh)                                                                                                | 0.7    | -      | 1.7    | 1.5    | -    | -    |
| Notes                                                                                                                |        |        |        |        |      |      |
| ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |        |        |        |        |      |      |

Lanier Tract DRI

5: GA 53 & Lanier Valley Dr/Ahaluna Dr

phase two a.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Volume (vph)               | 21                                                                                | 6                                                                                 | 127                                                                               | 92                                                                                | 3                                                                                 | 27                                                                                | 61                                                                                  | 831                                                                                 | 47                                                                                  | 21                                                                                  | 2139                                                                                | 0                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 2%                                                                                |                                                                                   |                                                                                   | -4%                                                                               |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 100                                                                                 |                                                                                     | 0                                                                                   | 140                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.889                                                                             |                                                                                   |                                                                                   | 0.970                                                                             |                                                                                   |                                                                                     | 0.992                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   | 0.993                                                                             |                                                                                   |                                                                                   | 0.964                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1661                                                                              | 0                                                                                 | 0                                                                                 | 1812                                                                              | 0                                                                                 | 1796                                                                                | 3497                                                                                | 0                                                                                   | 1814                                                                                | 3628                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.945                                                                             |                                                                                   |                                                                                   | 0.481                                                                             |                                                                                   | 0.037                                                                               |                                                                                     |                                                                                     | 0.277                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1580                                                                              | 0                                                                                 | 0                                                                                 | 904                                                                               | 0                                                                                 | 70                                                                                  | 3497                                                                                | 0                                                                                   | 529                                                                                 | 3628                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 58                                                                                |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                     | 11                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 340                                                                               |                                                                                   |                                                                                   | 322                                                                               |                                                                                   |                                                                                     | 888                                                                                 |                                                                                     |                                                                                     | 1417                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.7                                                                               |                                                                                   |                                                                                   | 7.3                                                                               |                                                                                   |                                                                                     | 13.5                                                                                |                                                                                     |                                                                                     | 21.5                                                                                |                                                                                     |
| Peak Hour Factor           | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.83                                                                              | 0.83                                                                              | 0.83                                                                              | 0.85                                                                                | 0.85                                                                                | 0.85                                                                                | 0.87                                                                                | 0.87                                                                                | 0.87                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 23                                                                                | 7                                                                                 | 140                                                                               | 111                                                                               | 4                                                                                 | 33                                                                                | 72                                                                                  | 978                                                                                 | 55                                                                                  | 24                                                                                  | 2459                                                                                | 0                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 170                                                                               | 0                                                                                 | 0                                                                                 | 148                                                                               | 0                                                                                 | 72                                                                                  | 1033                                                                                | 0                                                                                   | 24                                                                                  | 2459                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 |                                                                                     | 0                                                                                   | 336                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   |                                                                                     | 0                                                                                   | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 8                                                                                 | 8                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 10.6                                                                                | 23.0                                                                                |                                                                                     | 23.0                                                                                | 23.0                                                                                |                                                                                     |

# Lanier Tract DRI

## 5: GA 53 & Lanier Valley Dr/Ahaluna Dr

phase two a.m.

|                       |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group            | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Total Split (s)       | 30.0                                                                              | 30.0                                                                              |                                                                                   | 30.0                                                                              | 30.0                                                                              |                                                                                   | 10.6                                                                               | 120.0                                                                               |                                                                                     | 109.4                                                                               | 109.4                                                                               |                                                                                     |
| Total Split (%)       | 20.0%                                                                             | 20.0%                                                                             |                                                                                   | 20.0%                                                                             | 20.0%                                                                             |                                                                                   | 7.1%                                                                               | 80.0%                                                                               |                                                                                     | 72.9%                                                                               | 72.9%                                                                               |                                                                                     |
| Maximum Green (s)     | 23.4                                                                              | 23.4                                                                              |                                                                                   | 23.4                                                                              | 23.4                                                                              |                                                                                   | 5.0                                                                                | 113.9                                                                               |                                                                                     | 103.3                                                                               | 103.3                                                                               |                                                                                     |
| Yellow Time (s)       | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 3.0                                                                                | 4.5                                                                                 |                                                                                     | 4.5                                                                                 | 4.5                                                                                 |                                                                                     |
| All-Red Time (s)      | 2.6                                                                               | 2.6                                                                               |                                                                                   | 2.6                                                                               | 2.6                                                                               |                                                                                   | 2.6                                                                                | 1.6                                                                                 |                                                                                     | 1.6                                                                                 | 1.6                                                                                 |                                                                                     |
| Lost Time Adjust (s)  |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)   |                                                                                   | 6.6                                                                               |                                                                                   |                                                                                   | 6.6                                                                               |                                                                                   | 5.6                                                                                | 6.1                                                                                 |                                                                                     | 6.1                                                                                 | 6.1                                                                                 |                                                                                     |
| Lead/Lag              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                                |                                                                                     |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s) | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode           | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                               | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               |                                                                                     |
| Act Effect Green (s)  |                                                                                   | 23.4                                                                              |                                                                                   |                                                                                   | 23.4                                                                              |                                                                                   | 114.4                                                                              | 113.9                                                                               |                                                                                     | 103.3                                                                               | 103.3                                                                               |                                                                                     |
| Actuated g/C Ratio    |                                                                                   | 0.16                                                                              |                                                                                   |                                                                                   | 0.16                                                                              |                                                                                   | 0.76                                                                               | 0.76                                                                                |                                                                                     | 0.69                                                                                | 0.69                                                                                |                                                                                     |
| v/c Ratio             |                                                                                   | 0.58                                                                              |                                                                                   |                                                                                   | 1.01                                                                              |                                                                                   | 0.65                                                                               | 0.39                                                                                |                                                                                     | 0.07                                                                                | 0.98                                                                                |                                                                                     |
| Control Delay         |                                                                                   | 46.8                                                                              |                                                                                   |                                                                                   | 134.1                                                                             |                                                                                   | 57.0                                                                               | 3.3                                                                                 |                                                                                     | 8.2                                                                                 | 37.4                                                                                |                                                                                     |
| Queue Delay           |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Delay           |                                                                                   | 46.8                                                                              |                                                                                   |                                                                                   | 134.1                                                                             |                                                                                   | 57.0                                                                               | 3.3                                                                                 |                                                                                     | 8.2                                                                                 | 37.4                                                                                |                                                                                     |
| LOS                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | F                                                                                 |                                                                                   | E                                                                                  | A                                                                                   |                                                                                     | A                                                                                   | D                                                                                   |                                                                                     |
| Approach Delay        |                                                                                   | 46.8                                                                              |                                                                                   |                                                                                   | 134.1                                                                             |                                                                                   |                                                                                    | 6.8                                                                                 |                                                                                     |                                                                                     | 37.1                                                                                |                                                                                     |
| Approach LOS          |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | F                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 26 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.01

Intersection Signal Delay: 32.6

Intersection LOS: C

Intersection Capacity Utilization 91.4%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 5: GA 53 & Lanier Valley Dr/Ahaluna Dr

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |  |  |
| 120 s                                                                               |                                                                                     |                                                                                     | 30 s                                                                                |                                                                                     |                                                                                     | 30 s                                                                                |                                                                                     |                                                                                     |
|  |  |  |  |  |  |  |  |  |
| 10.6 s                                                                              |                                                                                     |                                                                                     | 109.4 s                                                                             |                                                                                     |                                                                                     | 30 s                                                                                |                                                                                     |                                                                                     |



## Lanier Tract DRI

## 6: 53-Dawsonville Hwy &amp; Academy Sports

phase two a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |  |   |  |  |  |  |  |
| Volume (vph)               | 2                                                                                 | 0                                                                                 | 7                                                                                 | 2                                                                                 | 0                                                                                 | 0                                                                                 | 12                                                                                  | 909                                                                                 | 10                                                                                  | 6                                                                                   | 2287                                                                                | 4                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 4%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 70                                                                                | 200                                                                                 |                                                                                     | 170                                                                                 | 190                                                                                 |                                                                                     | 360                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1805                                                                              | 1900                                                                              | 1615                                                                              | 1769                                                                              | 1862                                                                              | 1862                                                                              | 1796                                                                                | 3556                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 0.031                                                                               |                                                                                     |                                                                                     | 0.266                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1900                                                                              | 1900                                                                              | 1615                                                                              | 1862                                                                              | 1862                                                                              | 1862                                                                              | 59                                                                                  | 3556                                                                                | 1607                                                                                | 505                                                                                 | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 67                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 68                                                                                  |                                                                                     |                                                                                     | 68                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 262                                                                               |                                                                                   |                                                                                   | 246                                                                               |                                                                                   |                                                                                     | 1836                                                                                |                                                                                     |                                                                                     | 685                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.1                                                                               |                                                                                   |                                                                                   | 6.7                                                                               |                                                                                   |                                                                                     | 27.8                                                                                |                                                                                     |                                                                                     | 10.4                                                                                |                                                                                     |
| Peak Hour Factor           | 0.67                                                                              | 0.67                                                                              | 0.67                                                                              | 0.50                                                                              | 0.50                                                                              | 0.50                                                                              | 0.86                                                                                | 0.86                                                                                | 0.86                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 3                                                                                 | 0                                                                                 | 10                                                                                | 4                                                                                 | 0                                                                                 | 0                                                                                 | 14                                                                                  | 1057                                                                                | 12                                                                                  | 7                                                                                   | 2541                                                                                | 4                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 3                                                                                 | 0                                                                                 | 10                                                                                | 4                                                                                 | 0                                                                                 | 0                                                                                 | 14                                                                                  | 1057                                                                                | 12                                                                                  | 7                                                                                   | 2541                                                                                | 4                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              |                                                                                   | Perm                                                                              | Perm                                                                              |                                                                                   | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 2                                                                                   |                                                                                     | 2                                                                                   | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 42.0                                                                              | 42.0                                                                              | 42.0                                                                              | 42.4                                                                              | 42.4                                                                              | 42.4                                                                              | 11.4                                                                                | 30.3                                                                                | 30.3                                                                                | 11.0                                                                                | 29.3                                                                                | 29.3                                                                                |

# Lanier Tract DRI

## 6: 53-Dawsonville Hwy & Academy Sports

phase two a.m.

| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Total Split (s)         | 42.4  | 42.4  | 42.4  | 42.4  | 42.4  | 42.4  | 11.4  | 96.6  | 96.6  | 11.0  | 96.2  | 96.2  |
| Total Split (%)         | 28.3% | 28.3% | 28.3% | 28.3% | 28.3% | 28.3% | 7.6%  | 64.4% | 64.4% | 7.3%  | 64.1% | 64.1% |
| Maximum Green (s)       | 36.0  | 36.0  | 36.0  | 36.0  | 36.0  | 36.0  | 5.0   | 90.4  | 90.4  | 5.0   | 90.0  | 90.0  |
| Yellow Time (s)         | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 4.3   | 4.3   | 3.0   | 4.3   | 4.3   |
| All-Red Time (s)        | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 1.9   | 1.9   | 3.0   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.2   | 6.2   | 6.0   | 6.2   | 6.2   |
| Lead/Lag                |       |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None  | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 23.0  | 23.0  | 23.0  | 32.0  | 32.0  | 32.0  |       | 20.0  | 20.0  |       | 19.0  | 19.0  |
| Pedestrian Calls (#/hr) | 0     | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    | 6.1   |       | 6.1   | 6.1   |       |       | 137.2 | 139.9 | 139.9 | 136.1 | 137.4 | 137.4 |
| Actuated g/C Ratio      | 0.04  |       | 0.04  | 0.04  |       |       | 0.91  | 0.93  | 0.93  | 0.91  | 0.92  | 0.92  |
| v/c Ratio               | 0.04  |       | 0.08  | 0.05  |       |       | 0.12  | 0.32  | 0.01  | 0.01  | 0.77  | 0.00  |
| Control Delay           | 69.5  |       | 1.1   | 70.0  |       |       | 6.0   | 1.1   | 0.0   | 0.8   | 5.1   | 0.0   |
| Queue Delay             | 0.0   |       | 0.0   | 0.0   |       |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay             | 69.5  |       | 1.1   | 70.0  |       |       | 6.0   | 1.1   | 0.0   | 0.8   | 5.1   | 0.0   |
| LOS                     | E     |       | A     | E     |       |       | A     | A     | A     | A     | A     | A     |
| Approach Delay          |       |       |       |       |       |       |       | 1.2   |       |       | 5.1   |       |
| Approach LOS            |       |       |       |       |       |       |       | A     |       |       | A     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 27 (18%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 145

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.77

Intersection Signal Delay: 4.0

Intersection LOS: A

Intersection Capacity Utilization 87.4%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 6: 53-Dawsonville Hwy & Academy Sports

|        |    |        |        |        |    |
|--------|----|--------|--------|--------|----|
|        | ø1 |        | ø2 (R) |        | ø4 |
| 11 s   |    | 96.6 s |        | 42.4 s |    |
|        | ø5 |        | ø6 (R) |        | ø8 |
| 11.4 s |    | 96.2 s |        | 42.4 s |    |

## Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 &amp; McEver Road/McEver

phase two a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |                                                                                   |   |  |  |  |  |  |
| Volume (vph)               | 462                                                                               | 31                                                                                | 378                                                                               | 46                                                                                | 21                                                                                | 22                                                                                | 311                                                                                 | 572                                                                                 | 61                                                                                  | 34                                                                                  | 1352                                                                                | 942                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 1%                                                                                |                                                                                   |                                                                                   | 5%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 180                                                                               |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 310                                                                                 |                                                                                     | 185                                                                                 | 255                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 50                                                                                |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.872                                                                             | 0.850                                                                             |                                                                                   | 0.924                                                                             |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 3484                                                                              | 1566                                                                              | 1527                                                                              | 1760                                                                              | 1712                                                                              | 0                                                                                 | 3484                                                                                | 3487                                                                                | 1575                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   | 0.599                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 3484                                                                              | 1566                                                                              | 1527                                                                              | 1110                                                                              | 1712                                                                              | 0                                                                                 | 3484                                                                                | 3487                                                                                | 1575                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 183                                                                               | 207                                                                               |                                                                                   | 34                                                                                |                                                                                   |                                                                                     |                                                                                     | 184                                                                                 |                                                                                     |                                                                                     | 541                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 45                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 580                                                                               |                                                                                   |                                                                                   | 331                                                                               |                                                                                   |                                                                                     | 921                                                                                 |                                                                                     |                                                                                     | 1624                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 8.8                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                     | 14.0                                                                                |                                                                                     |                                                                                     | 24.6                                                                                |                                                                                     |
| Peak Hour Factor           | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.62                                                                              | 0.62                                                                              | 0.62                                                                              | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 3%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 476                                                                               | 32                                                                                | 390                                                                               | 74                                                                                | 34                                                                                | 35                                                                                | 334                                                                                 | 615                                                                                 | 66                                                                                  | 38                                                                                  | 1502                                                                                | 1047                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   | 47%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 476                                                                               | 215                                                                               | 207                                                                               | 74                                                                                | 69                                                                                | 0                                                                                 | 334                                                                                 | 615                                                                                 | 66                                                                                  | 38                                                                                  | 1502                                                                                | 1047                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 24                                                                                |                                                                                   |                                                                                   | 24                                                                                |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                             | NA                                                                                |                                                                                   | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 8                                                                                 |                                                                                   | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 8                                                                                 | 8                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 13.2                                                                              | 50.2                                                                              | 50.2                                                                              | 11.6                                                                              | 48.2                                                                              |                                                                                   | 13.4                                                                                | 35.6                                                                                | 35.6                                                                                | 12.9                                                                                | 44.6                                                                                | 44.6                                                                                |

# Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 & McEver Road/McEver

phase two a.m.

|                         |  |       |       |      |       |     |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|------|-------|-----|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL  | WBT   | WBR | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 23.0                                                                               | 59.1  | 59.1  | 12.1 | 48.2  |     | 19.0  | 63.0  | 63.0  | 15.8  | 59.8  | 59.8  |
| Total Split (%)         | 15.3%                                                                              | 39.4% | 39.4% | 8.1% | 32.1% |     | 12.7% | 42.0% | 42.0% | 10.5% | 39.9% | 39.9% |
| Maximum Green (s)       | 15.7                                                                               | 51.8  | 51.8  | 5.6  | 40.9  |     | 11.5  | 56.4  | 56.4  | 8.6   | 53.2  | 53.2  |
| Yellow Time (s)         | 4.3                                                                                | 4.3   | 4.3   | 3.5  | 4.3   |     | 4.5   | 4.4   | 4.4   | 4.2   | 4.4   | 4.4   |
| All-Red Time (s)        | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 2.2   | 2.2   | 3.0   | 2.2   | 2.2   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 7.3                                                                                | 7.3   | 7.3   | 6.5  | 7.3   |     | 7.5   | 6.6   | 6.6   | 7.2   | 6.6   | 6.6   |
| Lead/Lag                | Lead                                                                               | Lag   | Lag   | Lead | Lag   |     | Lag   | Lag   | Lag   | Lead  | Lead  | Lead  |
| Lead-Lag Optimize?      | Yes                                                                                | Yes   | Yes   | Yes  | Yes   |     | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None | None  |     | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           |                                                                                    | 4.0   | 4.0   |      | 4.0   |     |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    | 38.0  | 38.0  |      | 36.0  |     |       | 25.0  | 25.0  |       | 34.0  | 34.0  |
| Pedestrian Calls (#/hr) |                                                                                    | 0     | 0     |      | 0     |     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    | 16.1                                                                               | 17.6  | 17.6  | 14.0 | 8.9   |     | 11.5  | 93.2  | 93.2  | 8.5   | 87.4  | 87.4  |
| Actuated g/C Ratio      | 0.11                                                                               | 0.12  | 0.12  | 0.09 | 0.06  |     | 0.08  | 0.62  | 0.62  | 0.06  | 0.58  | 0.58  |
| v/c Ratio               | 1.28                                                                               | 0.62  | 0.57  | 0.58 | 0.52  |     | 1.25  | 0.28  | 0.06  | 0.37  | 0.71  | 0.89  |
| Control Delay           | 194.8                                                                              | 20.5  | 13.4  | 70.0 | 51.0  |     | 197.4 | 17.8  | 1.4   | 74.9  | 24.1  | 17.6  |
| Queue Delay             | 0.0                                                                                | 0.0   | 0.0   | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay             | 194.8                                                                              | 20.5  | 13.4  | 70.0 | 51.0  |     | 197.4 | 17.8  | 1.4   | 74.9  | 24.1  | 17.6  |
| LOS                     | F                                                                                  | C     | B     | E    | D     |     | F     | B     | A     | E     | C     | B     |
| Approach Delay          |                                                                                    | 111.2 |       |      | 60.9  |     |       | 75.8  |       |       | 22.2  |       |
| Approach LOS            |                                                                                    | F     |       |      | E     |     |       | E     |       |       | C     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 19 (13%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.28

Intersection Signal Delay: 52.3

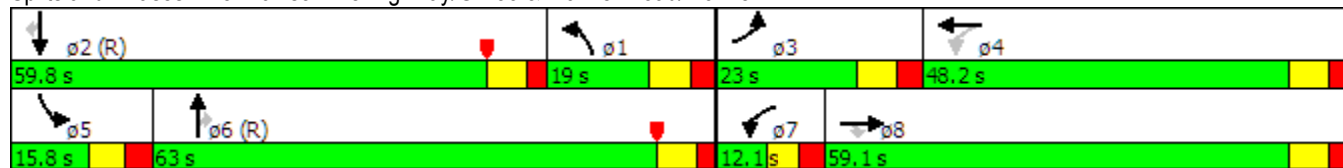
Intersection LOS: D

Intersection Capacity Utilization 89.2%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 8: Dawsonville Highway/GA 53 & McEver Road/McEver



## Lanier Tract DRI

## 9: Dawsonville Highway &amp; Greenhill Circle/Greenhill Circle

phase two a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 74                                                                                | 1                                                                                 | 156                                                                               | 7                                                                                 | 1                                                                                 | 4                                                                                 | 149                                                                                 | 891                                                                                 | 11                                                                                  | 13                                                                                  | 1610                                                                                | 57                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 3%                                                                                |                                                                                   |                                                                                   | 7%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 190                                                                                 |                                                                                     | 190                                                                                 | 185                                                                                 |                                                                                     | 100                                                                                 |
| Storage Lanes              | 0                                                                                 |                                                                                   | 1                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              |                                                                                   | 0.953                                                                             |                                                                                   |                                                                                   | 0.957                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1784                                                                              | 1591                                                                              | 0                                                                                 | 1755                                                                              | 1558                                                                              | 1796                                                                                | 3522                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   | 0.721                                                                             |                                                                                   |                                                                                   | 0.751                                                                             |                                                                                   | 0.072                                                                               |                                                                                     |                                                                                     | 0.277                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1349                                                                              | 1591                                                                              | 0                                                                                 | 1377                                                                              | 1558                                                                              | 136                                                                                 | 3522                                                                                | 1607                                                                                | 526                                                                                 | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 130                                                                               |                                                                                   |                                                                                   | 102                                                                               |                                                                                     |                                                                                     | 57                                                                                  |                                                                                     |                                                                                     | 101                                                                                 |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 288                                                                               |                                                                                   |                                                                                   | 254                                                                               |                                                                                   |                                                                                     | 778                                                                                 |                                                                                     |                                                                                     | 921                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.9                                                                               |                                                                                   |                                                                                   | 6.9                                                                               |                                                                                   |                                                                                     | 11.8                                                                                |                                                                                     |                                                                                     | 14.0                                                                                |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.69                                                                              | 0.69                                                                              | 0.69                                                                              | 0.86                                                                                | 0.86                                                                                | 0.86                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 82                                                                                | 1                                                                                 | 173                                                                               | 10                                                                                | 1                                                                                 | 6                                                                                 | 173                                                                                 | 1036                                                                                | 13                                                                                  | 14                                                                                  | 1750                                                                                | 62                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 83                                                                                | 173                                                                               | 0                                                                                 | 11                                                                                | 6                                                                                 | 173                                                                                 | 1036                                                                                | 13                                                                                  | 14                                                                                  | 1750                                                                                | 62                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.02                                                                              | 1.02                                                                              | 1.02                                                                              | 1.05                                                                              | 1.05                                                                              | 1.05                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              | 23.0                                                                              | 39.9                                                                              | 39.9                                                                              | 39.9                                                                              | 11.0                                                                                | 28.0                                                                                | 28.0                                                                                | 10.0                                                                                | 36.0                                                                                | 36.0                                                                                |

# Lanier Tract DRI

## 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle

phase two a.m.

|                         |  |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 39.9                                                                               | 39.9  | 39.9  | 39.9  | 39.9  | 39.9  | 21.0  | 100.1 | 100.1 | 10.0  | 89.1  | 89.1  |
| Total Split (%)         | 26.6%                                                                              | 26.6% | 26.6% | 26.6% | 26.6% | 26.6% | 14.0% | 66.7% | 66.7% | 6.7%  | 59.4% | 59.4% |
| Maximum Green (s)       | 34.0                                                                               | 34.0  | 34.0  | 34.0  | 34.0  | 34.0  | 15.0  | 94.1  | 94.1  | 5.0   | 83.1  | 83.1  |
| Yellow Time (s)         | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 4.4   | 4.4   | 3.5   | 4.4   | 4.4   |
| All-Red Time (s)        | 2.9                                                                                | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 3.0   | 1.6   | 1.6   | 1.5   | 1.6   | 1.6   |
| Lost Time Adjust (s)    |                                                                                    | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |                                                                                    | 5.9   | 5.9   |       | 5.9   | 5.9   | 6.0   | 6.0   | 6.0   | 5.0   | 6.0   | 6.0   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           |                                                                                    |       |       | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    |       |       | 30.0  | 30.0  | 30.0  |       | 18.0  | 18.0  |       | 26.0  | 26.0  |
| Pedestrian Calls (#/hr) |                                                                                    |       |       | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    |                                                                                    | 14.6  | 14.6  |       | 14.6  | 14.6  | 123.5 | 119.1 | 119.1 | 108.7 | 102.0 | 102.0 |
| Actuated g/C Ratio      |                                                                                    | 0.10  | 0.10  |       | 0.10  | 0.10  | 0.82  | 0.79  | 0.79  | 0.72  | 0.68  | 0.68  |
| v/c Ratio               |                                                                                    | 0.64  | 0.64  |       | 0.08  | 0.02  | 0.61  | 0.37  | 0.01  | 0.03  | 0.71  | 0.05  |
| Control Delay           |                                                                                    | 85.5  | 29.1  |       | 59.9  | 0.2   | 33.5  | 4.7   | 0.0   | 4.2   | 14.8  | 1.0   |
| Queue Delay             |                                                                                    | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.1   | 0.0   |
| Total Delay             |                                                                                    | 85.5  | 29.1  |       | 59.9  | 0.2   | 33.5  | 4.7   | 0.0   | 4.2   | 14.9  | 1.0   |
| LOS                     |                                                                                    | F     | C     |       | E     | A     | C     | A     | A     | A     | B     | A     |
| Approach Delay          |                                                                                    | 47.4  |       |       | 38.8  |       |       | 8.7   |       |       | 14.4  |       |
| Approach LOS            |                                                                                    | D     |       |       | D     |       |       | A     |       |       | B     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 15.0

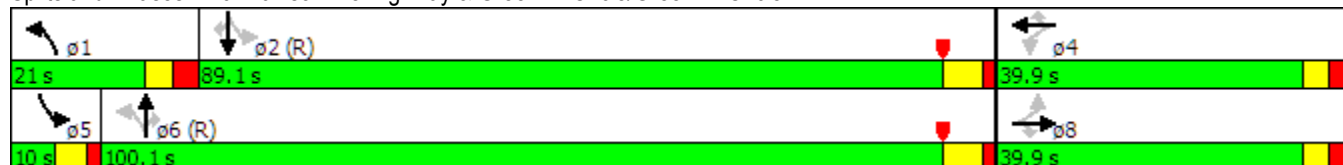
Intersection LOS: B

Intersection Capacity Utilization 78.5%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle



## Lanier Tract DRI

## 10: Dawsonville Highway &amp; Shallowford Rd/Best Buy

phase two a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |                                                                                   |  |  |   |  |  |  |  |  |
| Volume (vph)               | 162                                                                               | 2                                                                                 | 9                                                                                 | 2                                                                                 | 4                                                                                 | 3                                                                                 | 11                                                                                  | 864                                                                                 | 14                                                                                  | 1                                                                                   | 1425                                                                                | 387                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | -1%                                                                               |                                                                                   |                                                                                   | 10%                                                                               |                                                                                   |                                                                                     | -4%                                                                                 |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 350                                                                               |                                                                                   | 350                                                                               | 0                                                                                 |                                                                                   | 0                                                                                 | 350                                                                                 |                                                                                     | 150                                                                                 | 265                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 100                                                                               |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             | 0.953                                                                             |                                                                                   |                                                                                   | 0.982                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1723                                                                              | 1729                                                                              | 1623                                                                              | 0                                                                                 | 1773                                                                              | 1534                                                                              | 1841                                                                                | 3646                                                                                | 1647                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             | 0.953                                                                             |                                                                                   |                                                                                   | 0.982                                                                             |                                                                                   | 0.115                                                                               |                                                                                     |                                                                                     | 0.273                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1723                                                                              | 1729                                                                              | 1623                                                                              | 0                                                                                 | 1773                                                                              | 1534                                                                              | 223                                                                                 | 3646                                                                                | 1647                                                                                | 521                                                                                 | 3592                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 113                                                                               |                                                                                   |                                                                                   | 119                                                                               |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     | 219                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 653                                                                               |                                                                                   |                                                                                   | 178                                                                               |                                                                                   |                                                                                     | 957                                                                                 |                                                                                     |                                                                                     | 778                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 9.9                                                                               |                                                                                   |                                                                                   | 4.9                                                                               |                                                                                   |                                                                                     | 14.5                                                                                |                                                                                     |                                                                                     | 11.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.84                                                                              | 0.84                                                                              | 0.84                                                                              | 0.56                                                                              | 0.56                                                                              | 0.56                                                                              | 0.83                                                                                | 0.83                                                                                | 0.83                                                                                | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 193                                                                               | 2                                                                                 | 11                                                                                | 4                                                                                 | 7                                                                                 | 5                                                                                 | 13                                                                                  | 1041                                                                                | 17                                                                                  | 1                                                                                   | 1532                                                                                | 416                                                                                 |
| Shared Lane Traffic (%)    | 50%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 96                                                                                | 99                                                                                | 11                                                                                | 0                                                                                 | 11                                                                                | 5                                                                                 | 13                                                                                  | 1041                                                                                | 17                                                                                  | 1                                                                                   | 1532                                                                                | 416                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 0.99                                                                              | 0.99                                                                              | 0.99                                                                              | 1.07                                                                              | 1.07                                                                              | 1.07                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Split                                                                             | NA                                                                                | Perm                                                                              | Split                                                                             | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | Perm                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 3                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 3                                                                                 | 3                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 36.7                                                                              | 36.7                                                                              | 36.7                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                                | 28.8                                                                                | 28.8                                                                                | 30.8                                                                                | 30.8                                                                                | 30.8                                                                                |

# Lanier Tract DRI

## 10: Dawsonville Highway & Shallowford Rd/Best Buy

phase two a.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Total Split (s)         | 36.7                                                                              | 36.7                                                                              | 36.7                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                               | 74.4                                                                                | 74.4                                                                                | 63.6                                                                                | 63.6                                                                                | 63.6                                                                                |
| Total Split (%)         | 24.5%                                                                             | 24.5%                                                                             | 24.5%                                                                             | 25.9%                                                                             | 25.9%                                                                             | 25.9%                                                                             | 7.2%                                                                               | 49.6%                                                                               | 49.6%                                                                               | 42.4%                                                                               | 42.4%                                                                               | 42.4%                                                                               |
| Maximum Green (s)       | 30.0                                                                              | 30.0                                                                              | 30.0                                                                              | 33.0                                                                              | 33.0                                                                              | 33.0                                                                              | 5.0                                                                                | 67.6                                                                                | 67.6                                                                                | 56.8                                                                                | 56.8                                                                                | 56.8                                                                                |
| Yellow Time (s)         | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 4.9                                                                                 | 4.9                                                                                 | 4.9                                                                                 | 4.9                                                                                 | 4.9                                                                                 |
| All-Red Time (s)        | 2.2                                                                               | 2.2                                                                               | 2.2                                                                               | 2.9                                                                               | 2.9                                                                               | 2.9                                                                               | 2.8                                                                                | 1.9                                                                                 | 1.9                                                                                 | 1.9                                                                                 | 1.9                                                                                 | 1.9                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.7                                                                               | 6.7                                                                               | 6.7                                                                               |                                                                                   | 5.9                                                                               | 5.9                                                                               | 5.8                                                                                | 6.8                                                                                 | 6.8                                                                                 | 6.8                                                                                 | 6.8                                                                                 | 6.8                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lag                                                                               | Lead                                                                               |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 | Lag                                                                                 |
| Lead-Lag Optimize?      | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                                |                                                                                     |                                                                                     | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                               | C-Min                                                                               | C-Min                                                                               | C-Min                                                                               | C-Min                                                                               | C-Min                                                                               |
| Walk Time (s)           | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                    | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |
| Flash Dont Walk (s)     | 26.0                                                                              | 26.0                                                                              | 26.0                                                                              | 29.0                                                                              | 29.0                                                                              | 29.0                                                                              |                                                                                    | 18.0                                                                                | 18.0                                                                                | 20.0                                                                                | 20.0                                                                                | 20.0                                                                                |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Act Effect Green (s)    | 13.9                                                                              | 13.9                                                                              | 13.9                                                                              |                                                                                   | 6.5                                                                               | 6.5                                                                               | 118.2                                                                              | 117.2                                                                               | 117.2                                                                               | 112.4                                                                               | 112.4                                                                               | 112.4                                                                               |
| Actuated g/C Ratio      | 0.09                                                                              | 0.09                                                                              | 0.09                                                                              |                                                                                   | 0.04                                                                              | 0.04                                                                              | 0.79                                                                               | 0.78                                                                                | 0.78                                                                                | 0.75                                                                                | 0.75                                                                                | 0.75                                                                                |
| v/c Ratio               | 0.60                                                                              | 0.62                                                                              | 0.04                                                                              |                                                                                   | 0.14                                                                              | 0.03                                                                              | 0.05                                                                               | 0.37                                                                                | 0.01                                                                                | 0.00                                                                                | 0.57                                                                                | 0.33                                                                                |
| Control Delay           | 80.2                                                                              | 81.2                                                                              | 0.3                                                                               |                                                                                   | 72.5                                                                              | 0.3                                                                               | 6.1                                                                                | 6.5                                                                                 | 0.0                                                                                 | 7.0                                                                                 | 11.6                                                                                | 4.6                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.5                                                                                 | 0.0                                                                                 |
| Total Delay             | 80.2                                                                              | 81.2                                                                              | 0.3                                                                               |                                                                                   | 72.5                                                                              | 0.3                                                                               | 6.1                                                                                | 6.5                                                                                 | 0.0                                                                                 | 7.0                                                                                 | 12.0                                                                                | 4.6                                                                                 |
| LOS                     | F                                                                                 | F                                                                                 | A                                                                                 |                                                                                   | E                                                                                 | A                                                                                 | A                                                                                  | A                                                                                   | A                                                                                   | A                                                                                   | B                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 76.4                                                                              |                                                                                   |                                                                                   | 49.9                                                                              |                                                                                   |                                                                                    | 6.4                                                                                 |                                                                                     |                                                                                     | 10.4                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | E                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 45 (30%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.62

Intersection Signal Delay: 13.5

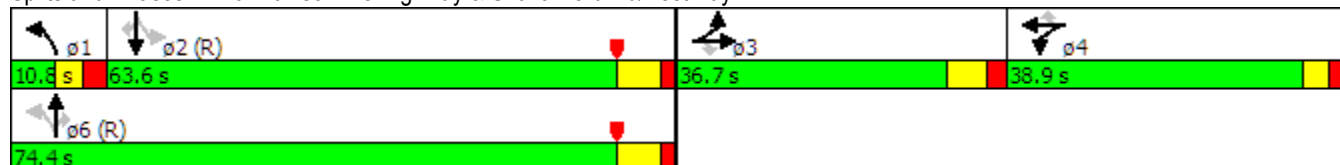
Intersection LOS: B

Intersection Capacity Utilization 63.9%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 10: Dawsonville Highway & Shallowford Rd/Best Buy





Lanier Tract DRI  
1: Sportsman Club Road & Strickland Drive

phase two p.m.

| Intersection             |        |       |        |      |        |           |
|--------------------------|--------|-------|--------|------|--------|-----------|
| Int Delay, s/veh         | 3.2    |       |        |      |        |           |
|                          |        |       |        |      |        |           |
| Movement                 | WBL    | WBR   |        | NBT  | NBR    | SBL SBT   |
| Vol, veh/h               | 24     | 0     |        | 32   | 28     | 0 25      |
| Conflicting Peds, #/hr   | 0      | 0     |        | 0    | 0      | 0 0       |
| Sign Control             | Stop   | Stop  |        | Free | Free   | Free Free |
| RT Channelized           | -      | None  |        | -    | None   | - None    |
| Storage Length           | 0      | -     |        | -    | -      | - -       |
| Veh in Median Storage, # | 0      | -     |        | 0    | -      | - 0       |
| Grade, %                 | 0      | -     |        | 0    | -      | - 0       |
| Peak Hour Factor         | 44     | 44    |        | 86   | 86     | 82 82     |
| Heavy Vehicles, %        | 2      | 2     |        | 2    | 2      | 2 2       |
| Mvmt Flow                | 55     | 0     |        | 37   | 33     | 0 30      |
|                          |        |       |        |      |        |           |
| Major/Minor              | Minor1 |       | Major1 |      | Major2 |           |
| Conflicting Flow All     | 83     | 53    |        | 0    | 0      | 70 0      |
| Stage 1                  | 53     | -     |        | -    | -      | - -       |
| Stage 2                  | 30     | -     |        | -    | -      | - -       |
| Critical Hdwy            | 6.42   | 6.22  |        | -    | -      | 4.12 -    |
| Critical Hdwy Stg 1      | 5.42   | -     |        | -    | -      | - -       |
| Critical Hdwy Stg 2      | 5.42   | -     |        | -    | -      | - -       |
| Follow-up Hdwy           | 3.518  | 3.318 |        | -    | -      | 2.218 -   |
| Pot Cap-1 Maneuver       | 919    | 1014  |        | -    | -      | 1531 -    |
| Stage 1                  | 970    | -     |        | -    | -      | - -       |
| Stage 2                  | 993    | -     |        | -    | -      | - -       |
| Platoon blocked, %       |        |       |        | -    | -      | -         |
| Mov Cap-1 Maneuver       | 919    | 1014  |        | -    | -      | 1531 -    |
| Mov Cap-2 Maneuver       | 919    | -     |        | -    | -      | - -       |
| Stage 1                  | 970    | -     |        | -    | -      | - -       |
| Stage 2                  | 993    | -     |        | -    | -      | - -       |
|                          |        |       |        |      |        |           |
| Approach                 | WB     |       | NB     |      | SB     |           |
| HCM Control Delay, s     | 9.2    |       | 0      |      | 0      |           |
| HCM LOS                  | A      |       |        |      |        |           |
|                          |        |       |        |      |        |           |
| Minor Lane/Major Mvmt    | NBT    | NBR   | WBLn1  | SBL  | SBT    |           |
| Capacity (veh/h)         | -      | -     | 919    | 1531 | -      |           |
| HCM Lane V/C Ratio       | -      | -     | 0.059  | -    | -      |           |
| HCM Control Delay (s)    | -      | -     | 9.2    | 0    | -      |           |
| HCM Lane LOS             | -      | -     | A      | A    | -      |           |
| HCM 95th %tile Q(veh)    | -      | -     | 0.2    | 0    | -      |           |

Lanier Tract DRI  
2: GA 53 & Sportsman Club Road

phase two p.m.

| Intersection               |        |                        |      |                            |      |      |                                |           |      |           |      |      |
|----------------------------|--------|------------------------|------|----------------------------|------|------|--------------------------------|-----------|------|-----------|------|------|
| Int Delay, s/veh           |        | 74.3                   |      |                            |      |      |                                |           |      |           |      |      |
|                            |        |                        |      |                            |      |      |                                |           |      |           |      |      |
| Movement                   | EBL    | EBT                    | EBR  | WBL                        | WBT  | WBR  | NBL                            | NBT       | NBR  | SBL       | SBT  | SBR  |
| Vol, veh/h                 | 22     | 1201                   | 0    | 26                         | 1914 | 34   | 0                              | 0         | 0    | 42        | 0    | 15   |
| Conflicting Peds, #/hr     | 0      | 0                      | 0    | 0                          | 0    | 0    | 0                              | 0         | 0    | 0         | 0    | 0    |
| Sign Control               | Free   | Free                   | Free | Free                       | Free | Free | Stop                           | Stop      | Stop | Stop      | Stop | Stop |
| RT Channelized             | -      | -                      | None | -                          | -    | None | -                              | -         | None | -         | -    | None |
| Storage Length             | 0      | -                      | -    | 0                          | -    | -    | -                              | -         | -    | -         | -    | -    |
| Veh in Median Storage, #   | -      | 0                      | -    | -                          | 0    | -    | -                              | 0         | -    | -         | 0    | -    |
| Grade, %                   | -      | 0                      | -    | -                          | 0    | -    | -                              | 0         | -    | -         | 0    | -    |
| Peak Hour Factor           | 95     | 95                     | 95   | 96                         | 96   | 96   | 92                             | 92        | 92   | 75        | 75   | 75   |
| Heavy Vehicles, %          | 2      | 2                      | 2    | 2                          | 2    | 2    | 2                              | 2         | 2    | 2         | 2    | 2    |
| Mvmt Flow                  | 23     | 1264                   | 0    | 27                         | 1994 | 35   | 0                              | 0         | 0    | 56        | 0    | 20   |
|                            |        |                        |      |                            |      |      |                                |           |      |           |      |      |
| Major/Minor                | Major1 |                        |      | Major2                     |      |      | Minor1                         |           |      | Minor2    |      |      |
| Conflicting Flow All       | 2029   | 0                      | 0    | 1264                       | 0    | 0    | 2362                           | 3394      | 632  | 2744      | 3377 | 1015 |
| Stage 1                    | -      | -                      | -    | -                          | -    | -    | 1311                           | 1311      | -    | 2066      | 2066 | -    |
| Stage 2                    | -      | -                      | -    | -                          | -    | -    | 1051                           | 2083      | -    | 678       | 1311 | -    |
| Critical Hdwy              | 4.14   | -                      | -    | 4.14                       | -    | -    | 7.54                           | 6.54      | 6.94 | 7.54      | 6.54 | 6.94 |
| Critical Hdwy Stg 1        | -      | -                      | -    | -                          | -    | -    | 6.54                           | 5.54      | -    | 6.54      | 5.54 | -    |
| Critical Hdwy Stg 2        | -      | -                      | -    | -                          | -    | -    | 6.54                           | 5.54      | -    | 6.54      | 5.54 | -    |
| Follow-up Hdwy             | 2.22   | -                      | -    | 2.22                       | -    | -    | 3.52                           | 4.02      | 3.32 | 3.52      | 4.02 | 3.32 |
| Pot Cap-1 Maneuver         | 276    | -                      | -    | 546                        | -    | -    | 19                             | 7         | 423  | ~ 9       | 7    | 236  |
| Stage 1                    | -      | -                      | -    | -                          | -    | -    | 168                            | 227       | -    | 56        | 95   | -    |
| Stage 2                    | -      | -                      | -    | -                          | -    | -    | 243                            | 94        | -    | 408       | 227  | -    |
| Platoon blocked, %         |        | -                      | -    |                            | -    | -    |                                |           |      |           |      |      |
| Mov Cap-1 Maneuver         | 276    | -                      | -    | 546                        | -    | -    | 16                             | 6         | 423  | ~ 8       | 6    | 236  |
| Mov Cap-2 Maneuver         | -      | -                      | -    | -                          | -    | -    | 16                             | 6         | -    | ~ 8       | 6    | -    |
| Stage 1                    | -      | -                      | -    | -                          | -    | -    | 154                            | 208       | -    | ~ 51      | 90   | -    |
| Stage 2                    | -      | -                      | -    | -                          | -    | -    | 211                            | 89        | -    | 374       | 208  | -    |
|                            |        |                        |      |                            |      |      |                                |           |      |           |      |      |
| Approach                   | EB     |                        |      | WB                         |      |      | NB                             |           |      | SB        |      |      |
| HCM Control Delay, s       | 0.3    |                        |      | 0.2                        |      |      | 0                              |           |      | \$ 3330.7 |      |      |
| HCM LOS                    |        |                        |      |                            |      |      | A                              |           |      | F         |      |      |
|                            |        |                        |      |                            |      |      |                                |           |      |           |      |      |
| Minor Lane/Major Mvmt      | NBLn1  | EBL                    | EBT  | EBR                        | WBL  | WBT  | WBR                            | SBLn1     |      |           |      |      |
| Capacity (veh/h)           | -      | 276                    | -    | -                          | 546  | -    | -                              | 11        |      |           |      |      |
| HCM Lane V/C Ratio         | -      | 0.084                  | -    | -                          | 0.05 | -    | -                              | 6.909     |      |           |      |      |
| HCM Control Delay (s)      | 0      | 19.2                   | -    | -                          | 11.9 | -    |                                | \$ 3330.7 |      |           |      |      |
| HCM Lane LOS               | A      | C                      | -    | -                          | B    | -    | -                              | F         |      |           |      |      |
| HCM 95th %tile Q(veh)      | -      | 0.3                    | -    | -                          | 0.2  | -    | -                              | 10.8      |      |           |      |      |
| Notes                      |        |                        |      |                            |      |      |                                |           |      |           |      |      |
| ~: Volume exceeds capacity |        | \$: Delay exceeds 300s |      | +: Computation Not Defined |      |      | *: All major volume in platoon |           |      |           |      |      |

Lanier Tract DRI  
3: Avonlea Way & GA 53

phase two p.m.

| Intersection     |     |  |  |  |  |  |  |  |  |  |  |  |
|------------------|-----|--|--|--|--|--|--|--|--|--|--|--|
| Int Delay, s/veh | 4.5 |  |  |  |  |  |  |  |  |  |  |  |

| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol, veh/h               | 12   | 0    | 52   | 2    | 0    | 11   | 68   | 1896 | 17   | 10   | 1298 | 15   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | 0    | -    | 0    | 0    | -    | 0    | 0    | -    | -    | 0    | -    | 0    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 76   | 76   | 76   | 80   | 80   | 80   | 95   | 95   | 95   | 100  | 100  | 100  |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 16   | 0    | 68   | 2    | 0    | 14   | 72   | 1996 | 18   | 10   | 1298 | 15   |

| Major/Minor          | Minor2 |      |      | Minor1 |      |      | Major1 |   |   | Major2 |   |   |
|----------------------|--------|------|------|--------|------|------|--------|---|---|--------|---|---|
| Conflicting Flow All | 2459   | 3475 | 649  | 2817   | 3466 | 1007 | 1298   | 0 | 0 | 2014   | 0 | 0 |
| Stage 1              | 1318   | 1318 | -    | 2148   | 2148 | -    | -      | - | - | -      | - | - |
| Stage 2              | 1141   | 2157 | -    | 669    | 1318 | -    | -      | - | - | -      | - | - |
| Critical Hdwy        | 7.54   | 6.54 | 6.94 | 7.54   | 6.54 | 6.94 | 4.14   | - | - | 4.14   | - | - |
| Critical Hdwy Stg 1  | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    | -      | - | - | -      | - | - |
| Critical Hdwy Stg 2  | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    | -      | - | - | -      | - | - |
| Follow-up Hdwy       | 3.52   | 4.02 | 3.32 | 3.52   | 4.02 | 3.32 | 2.22   | - | - | 2.22   | - | - |
| Pot Cap-1 Maneuver   | 16     | 6    | 412  | 8      | 7    | 239  | 530    | - | - | 279    | - | - |
| Stage 1              | 166    | 225  | -    | 49     | 87   | -    | -      | - | - | -      | - | - |
| Stage 2              | 214    | 86   | -    | 413    | 225  | -    | -      | - | - | -      | - | - |
| Platoon blocked, %   |        |      |      |        |      |      |        | - | - |        | - | - |
| Mov Cap-1 Maneuver   | ~ 13   | 5    | 412  | 6      | 6    | 239  | 530    | - | - | 279    | - | - |
| Mov Cap-2 Maneuver   | ~ 13   | 5    | -    | 6      | 6    | -    | -      | - | - | -      | - | - |
| Stage 1              | 143    | 217  | -    | 42     | 75   | -    | -      | - | - | -      | - | - |
| Stage 2              | 174    | 74   | -    | 332    | 217  | -    | -      | - | - | -      | - | - |

| Approach             | EB  | WB    | NB  | SB  |
|----------------------|-----|-------|-----|-----|
| HCM Control Delay, s | 148 | 146.1 | 0.4 | 0.1 |
| HCM LOS              | F   | F     |     |     |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1    | EBLn2 | WBLn1    | WBLn2 | SBL   | SBT | SBR |
|-----------------------|-------|-----|-----|----------|-------|----------|-------|-------|-----|-----|
| Capacity (veh/h)      | 530   | -   | -   | 13       | 412   | 6        | 239   | 279   | -   | -   |
| HCM Lane V/C Ratio    | 0.135 | -   | -   | 1.215    | 0.166 | 0.417    | 0.058 | 0.036 | -   | -   |
| HCM Control Delay (s) | 12.8  | -   | -   | \$ 722.2 | 15.5  | \$ 833.9 | 21    | 18.4  | -   | -   |
| HCM Lane LOS          | B     | -   | -   | F        | C     | F        | C     | C     | -   | -   |
| HCM 95th %tile Q(veh) | 0.5   | -   | -   | 2.6      | 0.6   | 0.8      | 0.2   | 0.1   | -   | -   |

| Notes                      |                        |                            |                                |  |  |  |  |  |  |  |
|----------------------------|------------------------|----------------------------|--------------------------------|--|--|--|--|--|--|--|
| ~: Volume exceeds capacity | \$: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |  |  |  |  |  |  |  |

Lanier Tract DRI  
4: Canterbury Road & GA 53

phase two p.m.

| Intersection                                                                                                         |          |      |      |            |       |        |        |       |      |        |      |      |
|----------------------------------------------------------------------------------------------------------------------|----------|------|------|------------|-------|--------|--------|-------|------|--------|------|------|
| Int Delay, s/veh                                                                                                     | 852.3    |      |      |            |       |        |        |       |      |        |      |      |
|                                                                                                                      |          |      |      |            |       |        |        |       |      |        |      |      |
| Movement                                                                                                             | EBL      | EBT  | EBR  | WBL        | WBT   | WBR    | NBL    | NBT   | NBR  | SBL    | SBT  | SBR  |
| Vol, veh/h                                                                                                           | 8        | 0    | 31   | 116        | 0     | 92     | 123    | 1860  | 128  | 68     | 1238 | 15   |
| Conflicting Peds, #/hr                                                                                               | 0        | 0    | 0    | 0          | 0     | 0      | 0      | 0     | 0    | 0      | 0    | 0    |
| Sign Control                                                                                                         | Stop     | Stop | Stop | Stop       | Stop  | Stop   | Free   | Free  | Free | Free   | Free | Free |
| RT Channelized                                                                                                       | -        | -    | None | -          | -     | None   | -      | -     | None | -      | -    | None |
| Storage Length                                                                                                       | 0        | -    | 0    | 0          | -     | 0      | 0      | -     | 0    | 0      | -    | 0    |
| Veh in Median Storage, #                                                                                             | -        | 0    | -    | -          | 0     | -      | -      | 0     | -    | -      | 0    | -    |
| Grade, %                                                                                                             | -        | 0    | -    | -          | 0     | -      | -      | 0     | -    | -      | 0    | -    |
| Peak Hour Factor                                                                                                     | 80       | 80   | 80   | 70         | 70    | 70     | 96     | 96    | 96   | 96     | 96   | 96   |
| Heavy Vehicles, %                                                                                                    | 2        | 2    | 2    | 2          | 2     | 2      | 2      | 2     | 2    | 2      | 2    | 2    |
| Mvmt Flow                                                                                                            | 10       | 0    | 39   | 166        | 0     | 131    | 128    | 1938  | 133  | 71     | 1290 | 16   |
|                                                                                                                      |          |      |      |            |       |        |        |       |      |        |      |      |
| Major/Minor                                                                                                          | Minor2   |      |      | Minor1     |       |        | Major1 |       |      | Major2 |      |      |
| Conflicting Flow All                                                                                                 | 2656     | 3625 | 645  | 2980       | 3625  | 969    | 1290   | 0     | 0    | 1938   | 0    | 0    |
| Stage 1                                                                                                              | 1431     | 1431 | -    | 2194       | 2194  | -      | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 1225     | 2194 | -    | 786        | 1431  | -      | -      | -     | -    | -      | -    | -    |
| Critical Hdwy                                                                                                        | 7.54     | 6.54 | 6.94 | 7.54       | 6.54  | 6.94   | 4.14   | -     | -    | 4.14   | -    | -    |
| Critical Hdwy Stg 1                                                                                                  | 6.54     | 5.54 | -    | 6.54       | 5.54  | -      | -      | -     | -    | -      | -    | -    |
| Critical Hdwy Stg 2                                                                                                  | 6.54     | 5.54 | -    | 6.54       | 5.54  | -      | -      | -     | -    | -      | -    | -    |
| Follow-up Hdwy                                                                                                       | 3.52     | 4.02 | 3.32 | 3.52       | 4.02  | 3.32   | 2.22   | -     | -    | 2.22   | -    | -    |
| Pot Cap-1 Maneuver                                                                                                   | 11       | 5    | 415  | ~ 6        | 5     | 253    | 533    | -     | -    | 299    | -    | -    |
| Stage 1                                                                                                              | 141      | 198  | -    | ~ 46       | 82    | -      | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 190      | 82   | -    | 351        | 198   | -      | -      | -     | -    | -      | -    | -    |
| Platoon blocked, %                                                                                                   |          |      |      |            |       |        |        | -     | -    |        | -    | -    |
| Mov Cap-1 Maneuver                                                                                                   | ~ 4      | 3    | 415  | ~ 4        | 3     | 253    | 533    | -     | -    | 299    | -    | -    |
| Mov Cap-2 Maneuver                                                                                                   | ~ 4      | 3    | -    | ~ 4        | 3     | -      | -      | -     | -    | -      | -    | -    |
| Stage 1                                                                                                              | 107      | 151  | -    | ~ 35       | 62    | -      | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 69       | 62   | -    | 243        | 151   | -      | -      | -     | -    | -      | -    | -    |
|                                                                                                                      |          |      |      |            |       |        |        |       |      |        |      |      |
| Approach                                                                                                             | EB       |      |      | WB         |       |        | NB     |       |      | SB     |      |      |
| HCM Control Delay, s                                                                                                 | \$ 484.2 |      |      | \$ 11156.3 |       |        | 0.8    |       |      | 1.1    |      |      |
| HCM LOS                                                                                                              | F        |      |      | F          |       |        |        |       |      |        |      |      |
|                                                                                                                      |          |      |      |            |       |        |        |       |      |        |      |      |
| Minor Lane/Major Mvmt                                                                                                | NBL      | NBT  | NBR  | EBLn1      | EBLn2 | WBLn1  | WBLn2  | SBL   | SBT  | SBR    |      |      |
| Capacity (veh/h)                                                                                                     | 533      | -    | -    | 4          | 415   | 4      | 253    | 299   | -    | -      |      |      |
| HCM Lane V/C Ratio                                                                                                   | 0.24     | -    | -    | 2.5        | 0.093 | 41.429 | 0.519  | 0.237 | -    | -      |      |      |
| HCM Control Delay (s)                                                                                                | 13.9     | -    |      | \$ 2303.8  | 14.0  | 9977.6 | 33.7   | 20.7  | -    | -      |      |      |
| HCM Lane LOS                                                                                                         | B        | -    | -    | F          | B     | F      | D      | C     | -    | -      |      |      |
| HCM 95th %tile Q(veh)                                                                                                | 0.9      | -    | -    | 2.3        | 0.3   | 22.9   | 2.7    | 0.9   | -    | -      |      |      |
| Notes                                                                                                                |          |      |      |            |       |        |        |       |      |        |      |      |
| ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |          |      |      |            |       |        |        |       |      |        |      |      |

| Intersection             |        |        |       |        |      |      |
|--------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh         | 1      |        |       |        |      |      |
| Movement                 | EBL    | EBR    | NBL   | NBT    | SBT  | SBR  |
| Vol, veh/h               | 1      | 52     | 95    | 2401   | 1711 | 10   |
| Conflicting Peds, #/hr   | 0      | 0      | 0     | 0      | 0    | 0    |
| Sign Control             | Stop   | Stop   | Free  | Free   | Free | Free |
| RT Channelized           | -      | Yield  | -     | Yield  | -    | None |
| Storage Length           | 0      | 0      | 200   | -      | -    | 360  |
| Veh in Median Storage, # | 0      | -      | -     | 0      | 0    | -    |
| Grade, %                 | 0      | -      | -     | 1      | 0    | -    |
| Peak Hour Factor         | 71     | 71     | 99    | 99     | 98   | 98   |
| Heavy Vehicles, %        | 0      | 0      | 0     | 0      | 1    | 0    |
| Mvmt Flow                | 1      | 73     | 96    | 2425   | 1746 | 10   |
| Major/Minor              | Minor2 | Major1 |       | Major2 |      |      |
| Conflicting Flow All     | 3151   | 874    | 1746  | 0      | -    | 0    |
| Stage 1                  | 1746   | -      | -     | -      | -    | -    |
| Stage 2                  | 1405   | -      | -     | -      | -    | -    |
| Critical Hdwy            | 6.8    | 6.9    | 4.1   | -      | -    | -    |
| Critical Hdwy Stg 1      | 5.8    | -      | -     | -      | -    | -    |
| Critical Hdwy Stg 2      | 5.8    | -      | -     | -      | -    | -    |
| Follow-up Hdwy           | 3.5    | 3.3    | 2.2   | -      | -    | -    |
| Pot Cap-1 Maneuver       | 9      | 297    | 364   | -      | -    | -    |
| Stage 1                  | 128    | -      | -     | -      | -    | -    |
| Stage 2                  | 196    | -      | -     | -      | -    | -    |
| Platoon blocked, %       |        |        |       | -      | -    | -    |
| Mov Cap-1 Maneuver       | 7      | 297    | 364   | -      | -    | -    |
| Mov Cap-2 Maneuver       | 7      | -      | -     | -      | -    | -    |
| Stage 1                  | 128    | -      | -     | -      | -    | -    |
| Stage 2                  | 144    | -      | -     | -      | -    | -    |
| Approach                 | EB     | NB     |       | SB     |      |      |
| HCM Control Delay, s     | 32.3   | 0.7    |       | 0      |      |      |
| HCM LOS                  | D      |        |       |        |      |      |
| Minor Lane/Major Mvmt    | NBL    | NBT    | EBLn1 | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)         | 364    | -      | 7     | 297    | -    | -    |
| HCM Lane V/C Ratio       | 0.264  | -      | 0.201 | 0.247  | -    | -    |
| HCM Control Delay (s)    | 18.4   | -      | 620.4 | 21     | -    | -    |
| HCM Lane LOS             | C      | -      | F     | C      | -    | -    |
| HCM 95th %tile Q(veh)    | 1      | -      | 0.5   | 1      | -    | -    |

## Lanier Tract DRI

## 5: GA 53 &amp; Lanier Valley Dr/Ahaluna Dr

phase two p.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Volume (vph)               | 23                                                                                | 1                                                                                 | 106                                                                               | 98                                                                                | 8                                                                                 | 64                                                                                | 198                                                                                 | 2041                                                                                | 114                                                                                 | 31                                                                                  | 1448                                                                                | 3                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 2%                                                                                |                                                                                   |                                                                                   | -4%                                                                               |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 100                                                                                 |                                                                                     | 0                                                                                   | 140                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.890                                                                             |                                                                                   |                                                                                   | 0.949                                                                             |                                                                                   |                                                                                     | 0.992                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   | 0.991                                                                             |                                                                                   |                                                                                   | 0.972                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1659                                                                              | 0                                                                                 | 0                                                                                 | 1788                                                                              | 0                                                                                 | 1796                                                                                | 3563                                                                                | 0                                                                                   | 1814                                                                                | 3592                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.906                                                                             |                                                                                   |                                                                                   | 0.612                                                                             |                                                                                   | 0.099                                                                               |                                                                                     |                                                                                     | 0.040                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1517                                                                              | 0                                                                                 | 0                                                                                 | 1126                                                                              | 0                                                                                 | 187                                                                                 | 3563                                                                                | 0                                                                                   | 76                                                                                  | 3592                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 119                                                                               |                                                                                   |                                                                                   | 17                                                                                |                                                                                   |                                                                                     | 10                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 340                                                                               |                                                                                   |                                                                                   | 322                                                                               |                                                                                   |                                                                                     | 1002                                                                                |                                                                                     |                                                                                     | 1457                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.7                                                                               |                                                                                   |                                                                                   | 7.3                                                                               |                                                                                   |                                                                                     | 15.2                                                                                |                                                                                     |                                                                                     | 22.1                                                                                |                                                                                     |
| Peak Hour Factor           | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 26                                                                                | 1                                                                                 | 119                                                                               | 109                                                                               | 9                                                                                 | 71                                                                                | 206                                                                                 | 2126                                                                                | 119                                                                                 | 32                                                                                  | 1508                                                                                | 3                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 146                                                                               | 0                                                                                 | 0                                                                                 | 189                                                                               | 0                                                                                 | 206                                                                                 | 2245                                                                                | 0                                                                                   | 32                                                                                  | 1511                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 |                                                                                     | 0                                                                                   | 336                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   |                                                                                     | 0                                                                                   | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 8                                                                                 | 8                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 10.6                                                                                | 23.0                                                                                |                                                                                     | 23.0                                                                                | 23.0                                                                                |                                                                                     |

# Lanier Tract DRI

## 5: GA 53 & Lanier Valley Dr/Ahaluna Dr

phase two p.m.

|                       |  |       |     |       |       |     |       |       |     |       |       |     |
|-----------------------|------------------------------------------------------------------------------------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Lane Group            | EBL                                                                                | EBT   | EBR | WBL   | WBT   | WBR | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
| Total Split (s)       | 36.0                                                                               | 36.0  |     | 36.0  | 36.0  |     | 22.0  | 124.0 |     | 102.0 | 102.0 |     |
| Total Split (%)       | 22.5%                                                                              | 22.5% |     | 22.5% | 22.5% |     | 13.8% | 77.5% |     | 63.8% | 63.8% |     |
| Maximum Green (s)     | 29.4                                                                               | 29.4  |     | 29.4  | 29.4  |     | 16.4  | 117.9 |     | 95.9  | 95.9  |     |
| Yellow Time (s)       | 4.0                                                                                | 4.0   |     | 4.0   | 4.0   |     | 3.0   | 4.5   |     | 4.5   | 4.5   |     |
| All-Red Time (s)      | 2.6                                                                                | 2.6   |     | 2.6   | 2.6   |     | 2.6   | 1.6   |     | 1.6   | 1.6   |     |
| Lost Time Adjust (s)  |                                                                                    | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Lost Time (s)   |                                                                                    | 6.6   |     |       | 6.6   |     | 5.6   | 6.1   |     | 6.1   | 6.1   |     |
| Lead/Lag              |                                                                                    |       |     |       |       |     | Lead  |       |     | Lag   | Lag   |     |
| Lead-Lag Optimize?    |                                                                                    |       |     |       |       |     | Yes   |       |     | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0                                                                                | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode           | None                                                                               | None  |     | None  | None  |     | None  | C-Max |     | C-Max | C-Max |     |
| Act Effect Green (s)  |                                                                                    | 26.9  |     |       | 26.9  |     | 120.9 | 120.4 |     | 101.9 | 101.9 |     |
| Actuated g/C Ratio    |                                                                                    | 0.17  |     |       | 0.17  |     | 0.76  | 0.75  |     | 0.64  | 0.64  |     |
| v/c Ratio             |                                                                                    | 0.41  |     |       | 0.93  |     | 0.76  | 0.84  |     | 0.67  | 0.66  |     |
| Control Delay         |                                                                                    | 17.7  |     |       | 106.1 |     | 36.4  | 15.3  |     | 86.6  | 20.9  |     |
| Queue Delay           |                                                                                    | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay           |                                                                                    | 17.7  |     |       | 106.1 |     | 36.4  | 15.3  |     | 86.6  | 20.9  |     |
| LOS                   |                                                                                    | B     |     |       | F     |     | D     | B     |     | F     | C     |     |
| Approach Delay        |                                                                                    | 17.7  |     |       | 106.1 |     |       | 17.0  |     |       | 22.3  |     |
| Approach LOS          |                                                                                    | B     |     |       | F     |     |       | B     |     |       | C     |     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 129 (81%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 22.8

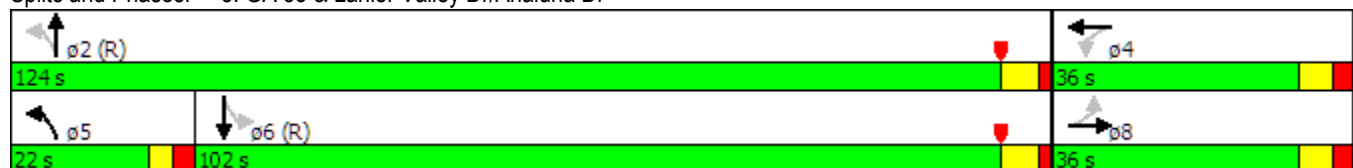
Intersection LOS: C

Intersection Capacity Utilization 96.3%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 5: GA 53 & Lanier Valley Dr/Ahaluna Dr



## Lanier Tract DRI

## 6: 53-Dawsonville Hwy &amp; Academy Sports

phase two p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |  |   |  |  |  |  |  |
| Volume (vph)               | 14                                                                                | 3                                                                                 | 66                                                                                | 130                                                                               | 8                                                                                 | 46                                                                                | 96                                                                                 | 2142                                                                                | 152                                                                                 | 21                                                                                  | 1503                                                                                | 30                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                               | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 4%                                                                                |                                                                                   |                                                                                    | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 70                                                                                | 200                                                                                |                                                                                     | 170                                                                                 | 190                                                                                 |                                                                                     | 360                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                  |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                 |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                    |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1805                                                                              | 1900                                                                              | 1615                                                                              | 1769                                                                              | 1862                                                                              | 1583                                                                              | 1796                                                                               | 3592                                                                                | 1607                                                                                | 1805                                                                                | 3574                                                                                | 1615                                                                                |
| Flt Permitted              | 0.751                                                                             |                                                                                   |                                                                                   | 0.756                                                                             |                                                                                   |                                                                                   | 0.106                                                                              |                                                                                     |                                                                                     | 0.037                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1427                                                                              | 1900                                                                              | 1615                                                                              | 1408                                                                              | 1862                                                                              | 1583                                                                              | 200                                                                                | 3592                                                                                | 1607                                                                                | 70                                                                                  | 3574                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 69                                                                                |                                                                                   |                                                                                   | 63                                                                                |                                                                                    |                                                                                     | 64                                                                                  |                                                                                     |                                                                                     | 64                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                    | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 262                                                                               |                                                                                   |                                                                                   | 246                                                                               |                                                                                   |                                                                                    | 1836                                                                                |                                                                                     |                                                                                     | 685                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.1                                                                               |                                                                                   |                                                                                   | 6.7                                                                               |                                                                                   |                                                                                    | 27.8                                                                                |                                                                                     |                                                                                     | 10.4                                                                                |                                                                                     |
| Peak Hour Factor           | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.80                                                                              | 0.80                                                                              | 0.80                                                                              | 0.98                                                                               | 0.98                                                                                | 0.98                                                                                | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                 | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 15                                                                                | 3                                                                                 | 69                                                                                | 162                                                                               | 10                                                                                | 58                                                                                | 98                                                                                 | 2186                                                                                | 155                                                                                 | 22                                                                                  | 1549                                                                                | 31                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 15                                                                                | 3                                                                                 | 69                                                                                | 162                                                                               | 10                                                                                | 58                                                                                | 98                                                                                 | 2186                                                                                | 155                                                                                 | 22                                                                                  | 1549                                                                                | 31                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                               | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                    | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                    | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                 |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                  | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                 | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                 | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                              | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 2                                                                                  |                                                                                     | 2                                                                                   | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 5                                                                                  | 2                                                                                   | 2                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 42.0                                                                              | 42.0                                                                              | 42.0                                                                              | 42.4                                                                              | 42.4                                                                              | 42.4                                                                              | 11.4                                                                               | 30.3                                                                                | 30.3                                                                                | 11.0                                                                                | 29.3                                                                                | 29.3                                                                                |



# Lanier Tract DRI

## 6: 53-Dawsonville Hwy & Academy Sports

phase two p.m.

| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Total Split (s)         | 42.4  | 42.4  | 42.4  | 42.4  | 42.4  | 42.4  | 16.6  | 106.6 | 106.6 | 11.0  | 101.0 | 101.0 |
| Total Split (%)         | 26.5% | 26.5% | 26.5% | 26.5% | 26.5% | 26.5% | 10.4% | 66.6% | 66.6% | 6.9%  | 63.1% | 63.1% |
| Maximum Green (s)       | 36.0  | 36.0  | 36.0  | 36.0  | 36.0  | 36.0  | 10.2  | 100.4 | 100.4 | 5.0   | 94.8  | 94.8  |
| Yellow Time (s)         | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 4.3   | 4.3   | 3.0   | 4.3   | 4.3   |
| All-Red Time (s)        | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 1.9   | 1.9   | 3.0   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.2   | 6.2   | 6.0   | 6.2   | 6.2   |
| Lead/Lag                |       |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None  | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 23.0  | 23.0  | 23.0  | 32.0  | 32.0  | 32.0  |       | 20.0  | 20.0  |       | 19.0  | 19.0  |
| Pedestrian Calls (#/hr) | 0     | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    | 23.7  | 23.7  | 23.7  | 23.7  | 23.7  | 23.7  | 121.5 | 116.4 | 116.4 | 115.5 | 109.4 | 109.4 |
| Actuated g/C Ratio      | 0.15  | 0.15  | 0.15  | 0.15  | 0.15  | 0.15  | 0.76  | 0.73  | 0.73  | 0.72  | 0.68  | 0.68  |
| v/c Ratio               | 0.07  | 0.01  | 0.23  | 0.78  | 0.04  | 0.20  | 0.42  | 0.84  | 0.13  | 0.19  | 0.63  | 0.03  |
| Control Delay           | 55.8  | 53.3  | 13.0  | 89.1  | 54.6  | 11.7  | 14.6  | 17.5  | 7.3   | 10.4  | 13.2  | 0.0   |
| Queue Delay             | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.1   | 0.0   |
| Total Delay             | 55.8  | 53.3  | 13.0  | 89.1  | 54.6  | 11.7  | 14.6  | 17.5  | 7.3   | 10.4  | 13.4  | 0.0   |
| LOS                     | E     | D     | B     | F     | D     | B     | B     | B     | A     | B     | B     | A     |
| Approach Delay          |       | 21.8  |       |       | 68.1  |       |       | 16.7  |       |       | 13.1  |       |
| Approach LOS            |       | C     |       |       | E     |       |       | B     |       |       | B     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 120 (75%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 145

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 18.2

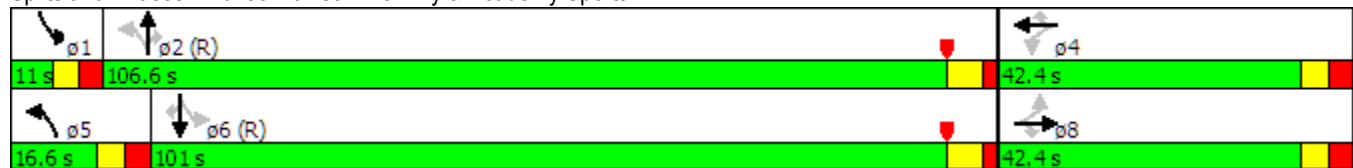
Intersection LOS: B

Intersection Capacity Utilization 92.7%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 6: 53-Dawsonville Hwy & Academy Sports



## Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 &amp; McEver Road/McEver

phase two p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |                                                                                   |   |  |  |  |  |  |
| Volume (vph)               | 996                                                                               | 235                                                                               | 426                                                                               | 96                                                                                | 100                                                                               | 93                                                                                | 478                                                                                 | 1632                                                                                | 51                                                                                  | 71                                                                                  | 1249                                                                                | 594                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 1%                                                                                |                                                                                   |                                                                                   | 5%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 180                                                                               |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 310                                                                                 |                                                                                     | 185                                                                                 | 255                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 50                                                                                |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.951                                                                             | 0.850                                                                             |                                                                                   | 0.928                                                                             |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 3484                                                                              | 1708                                                                              | 1527                                                                              | 1760                                                                              | 1719                                                                              | 0                                                                                 | 3484                                                                                | 3592                                                                                | 1607                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   | 0.432                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 3484                                                                              | 1708                                                                              | 1527                                                                              | 800                                                                               | 1719                                                                              | 0                                                                                 | 3484                                                                                | 3592                                                                                | 1607                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 18                                                                                | 302                                                                               |                                                                                   | 28                                                                                |                                                                                   |                                                                                     |                                                                                     | 172                                                                                 |                                                                                     |                                                                                     | 323                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 580                                                                               |                                                                                   |                                                                                   | 331                                                                               |                                                                                   |                                                                                     | 921                                                                                 |                                                                                     |                                                                                     | 1504                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 8.8                                                                               |                                                                                   |                                                                                   | 9.0                                                                               |                                                                                   |                                                                                     | 14.0                                                                                |                                                                                     |                                                                                     | 22.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.86                                                                              | 0.86                                                                              | 0.86                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 1048                                                                              | 247                                                                               | 448                                                                               | 112                                                                               | 116                                                                               | 108                                                                               | 493                                                                                 | 1682                                                                                | 53                                                                                  | 78                                                                                  | 1373                                                                                | 653                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   | 27%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 1048                                                                              | 368                                                                               | 327                                                                               | 112                                                                               | 224                                                                               | 0                                                                                 | 493                                                                                 | 1682                                                                                | 53                                                                                  | 78                                                                                  | 1373                                                                                | 653                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 24                                                                                |                                                                                   |                                                                                   | 24                                                                                |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                             | NA                                                                                |                                                                                   | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 8                                                                                 |                                                                                   | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 8                                                                                 | 8                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 13.2                                                                              | 50.2                                                                              | 50.2                                                                              | 11.6                                                                              | 48.2                                                                              |                                                                                   | 13.4                                                                                | 35.6                                                                                | 35.6                                                                                | 12.9                                                                                | 44.6                                                                                | 44.6                                                                                |

# Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 & McEver Road/McEver

phase two p.m.

|                         |  |       |       |      |       |     |       |       |       |      |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|------|-------|-----|-------|-------|-------|------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL  | WBT   | WBR | NBL   | NBT   | NBR   | SBL  | SBT   | SBR   |
| Total Split (s)         | 34.0                                                                               | 68.2  | 68.2  | 14.0 | 48.2  |     | 22.0  | 64.8  | 64.8  | 13.0 | 55.8  | 55.8  |
| Total Split (%)         | 21.3%                                                                              | 42.6% | 42.6% | 8.8% | 30.1% |     | 13.8% | 40.5% | 40.5% | 8.1% | 34.9% | 34.9% |
| Maximum Green (s)       | 26.7                                                                               | 60.9  | 60.9  | 7.5  | 40.9  |     | 14.5  | 58.2  | 58.2  | 5.8  | 49.2  | 49.2  |
| Yellow Time (s)         | 4.3                                                                                | 4.3   | 4.3   | 3.5  | 4.3   |     | 4.5   | 4.4   | 4.4   | 4.2  | 4.4   | 4.4   |
| All-Red Time (s)        | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 2.2   | 2.2   | 3.0  | 2.2   | 2.2   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Lost Time (s)     | 7.3                                                                                | 7.3   | 7.3   | 6.5  | 7.3   |     | 7.5   | 6.6   | 6.6   | 7.2  | 6.6   | 6.6   |
| Lead/Lag                | Lead                                                                               | Lag   | Lag   | Lead | Lag   |     | Lag   | Lag   | Lag   | Lead | Lead  | Lead  |
| Lead-Lag Optimize?      | Yes                                                                                | Yes   | Yes   | Yes  | Yes   |     | Yes   | Yes   | Yes   | Yes  | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None | None  |     | None  | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s)           |                                                                                    | 4.0   | 4.0   |      | 4.0   |     |       | 4.0   | 4.0   |      | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    | 38.0  | 38.0  |      | 36.0  |     |       | 25.0  | 25.0  |      | 34.0  | 34.0  |
| Pedestrian Calls (#/hr) |                                                                                    | 0     | 0     |      | 0     |     |       | 0     | 0     |      | 0     | 0     |
| Act Effect Green (s)    | 26.7                                                                               | 43.9  | 43.9  | 32.2 | 23.9  |     | 14.5  | 65.6  | 65.6  | 15.4 | 66.2  | 66.2  |
| Actuated g/C Ratio      | 0.17                                                                               | 0.27  | 0.27  | 0.20 | 0.15  |     | 0.09  | 0.41  | 0.41  | 0.10 | 0.41  | 0.41  |
| v/c Ratio               | 1.80                                                                               | 0.77  | 0.51  | 0.54 | 0.80  |     | 1.57  | 1.14  | 0.07  | 0.45 | 0.92  | 0.76  |
| Control Delay           | 403.8                                                                              | 61.1  | 8.7   | 47.9 | 77.3  |     | 313.6 | 125.0 | 0.1   | 65.4 | 68.6  | 41.7  |
| Queue Delay             | 0.0                                                                                | 58.4  | 3.3   | 32.9 | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.3   | 0.0   |
| Total Delay             | 403.8                                                                              | 119.4 | 12.1  | 80.8 | 77.3  |     | 313.6 | 125.0 | 0.1   | 65.4 | 68.8  | 41.7  |
| LOS                     | F                                                                                  | F     | B     | F    | E     |     | F     | F     | A     | E    | E     | D     |
| Approach Delay          |                                                                                    | 270.3 |       |      | 78.5  |     |       | 163.8 |       |      | 60.3  |       |
| Approach LOS            |                                                                                    | F     |       |      | E     |     |       | F     |       |      | E     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 52 (33%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.80

Intersection Signal Delay: 154.3

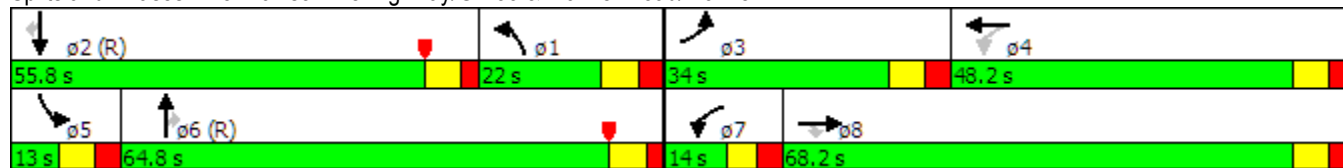
Intersection LOS: F

Intersection Capacity Utilization 112.3%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 8: Dawsonville Highway/GA 53 & McEver Road/McEver



## Lanier Tract DRI

## 9: Dawsonville Highway &amp; Greenhill Circle/Greenhill Circle

phase two p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 146                                                                               | 10                                                                                | 152                                                                               | 66                                                                                | 22                                                                                | 42                                                                                | 274                                                                                 | 2059                                                                                | 77                                                                                  | 44                                                                                  | 1650                                                                                | 59                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 3%                                                                                |                                                                                   |                                                                                   | 7%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 190                                                                                 |                                                                                     | 190                                                                                 | 185                                                                                 |                                                                                     | 100                                                                                 |
| Storage Lanes              | 0                                                                                 |                                                                                   | 1                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              |                                                                                   | 0.955                                                                             |                                                                                   |                                                                                   | 0.964                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1787                                                                              | 1591                                                                              | 0                                                                                 | 1767                                                                              | 1558                                                                              | 1796                                                                                | 3592                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   | 0.591                                                                             |                                                                                   |                                                                                   | 0.482                                                                             |                                                                                   | 0.042                                                                               |                                                                                     |                                                                                     | 0.044                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1106                                                                              | 1591                                                                              | 0                                                                                 | 884                                                                               | 1558                                                                              | 79                                                                                  | 3592                                                                                | 1607                                                                                | 84                                                                                  | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 167                                                                               |                                                                                   |                                                                                   | 95                                                                                |                                                                                     |                                                                                     | 54                                                                                  |                                                                                     |                                                                                     | 95                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 288                                                                               |                                                                                   |                                                                                   | 254                                                                               |                                                                                   |                                                                                     | 778                                                                                 |                                                                                     |                                                                                     | 921                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.9                                                                               |                                                                                   |                                                                                   | 6.9                                                                               |                                                                                   |                                                                                     | 11.8                                                                                |                                                                                     |                                                                                     | 14.0                                                                                |                                                                                     |
| Peak Hour Factor           | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.78                                                                              | 0.78                                                                              | 0.78                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 160                                                                               | 11                                                                                | 167                                                                               | 85                                                                                | 28                                                                                | 54                                                                                | 282                                                                                 | 2123                                                                                | 79                                                                                  | 46                                                                                  | 1737                                                                                | 62                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 171                                                                               | 167                                                                               | 0                                                                                 | 113                                                                               | 54                                                                                | 282                                                                                 | 2123                                                                                | 79                                                                                  | 46                                                                                  | 1737                                                                                | 62                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.02                                                                              | 1.02                                                                              | 1.02                                                                              | 1.05                                                                              | 1.05                                                                              | 1.05                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              | 23.0                                                                              | 39.9                                                                              | 39.9                                                                              | 39.9                                                                              | 11.0                                                                                | 28.0                                                                                | 28.0                                                                                | 10.0                                                                                | 36.0                                                                                | 36.0                                                                                |

# Lanier Tract DRI

## 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle

phase two p.m.

|                         |  |       |       |       |       |       |       |       |       |      |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL  | SBT   | SBR   |
| Total Split (s)         | 39.9                                                                               | 39.9  | 39.9  | 39.9  | 39.9  | 39.9  | 31.0  | 110.1 | 110.1 | 10.0 | 89.1  | 89.1  |
| Total Split (%)         | 24.9%                                                                              | 24.9% | 24.9% | 24.9% | 24.9% | 24.9% | 19.4% | 68.8% | 68.8% | 6.3% | 55.7% | 55.7% |
| Maximum Green (s)       | 34.0                                                                               | 34.0  | 34.0  | 34.0  | 34.0  | 34.0  | 25.0  | 104.1 | 104.1 | 5.0  | 83.1  | 83.1  |
| Yellow Time (s)         | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 4.4   | 4.4   | 3.5  | 4.4   | 4.4   |
| All-Red Time (s)        | 2.9                                                                                | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 3.0   | 1.6   | 1.6   | 1.5  | 1.6   | 1.6   |
| Lost Time Adjust (s)    |                                                                                    | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Lost Time (s)     |                                                                                    | 5.9   | 5.9   |       | 5.9   | 5.9   | 6.0   | 6.0   | 6.0   | 5.0  | 6.0   | 6.0   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes  | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s)           |                                                                                    |       |       | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |      | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    |       |       | 30.0  | 30.0  | 30.0  |       | 18.0  | 18.0  |      | 26.0  | 26.0  |
| Pedestrian Calls (#/hr) |                                                                                    |       |       | 0     | 0     | 0     |       | 0     | 0     |      | 0     | 0     |
| Act Effect Green (s)    |                                                                                    | 28.1  | 28.1  |       | 28.1  | 28.1  | 120.0 | 111.5 | 111.5 | 96.9 | 90.3  | 90.3  |
| Actuated g/C Ratio      |                                                                                    | 0.18  | 0.18  |       | 0.18  | 0.18  | 0.75  | 0.70  | 0.70  | 0.61 | 0.56  | 0.56  |
| v/c Ratio               |                                                                                    | 0.88  | 0.40  |       | 0.73  | 0.15  | 0.90  | 0.85  | 0.07  | 0.41 | 0.85  | 0.07  |
| Control Delay           |                                                                                    | 103.0 | 9.8   |       | 87.7  | 1.7   | 58.2  | 30.6  | 5.2   | 23.9 | 58.8  | 11.5  |
| Queue Delay             |                                                                                    | 0.0   | 5.9   |       | 87.6  | 0.0   | 0.0   | 46.9  | 0.0   | 0.0  | 3.2   | 0.0   |
| Total Delay             |                                                                                    | 103.0 | 15.7  |       | 175.3 | 1.7   | 58.2  | 77.5  | 5.2   | 23.9 | 62.0  | 11.5  |
| LOS                     |                                                                                    | F     | B     |       | F     | A     | E     | E     | A     | C    | E     | B     |
| Approach Delay          |                                                                                    | 59.8  |       |       | 119.2 |       |       | 73.0  |       |      | 59.3  |       |
| Approach LOS            |                                                                                    | E     |       |       | F     |       |       | E     |       |      | E     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 68.5

Intersection LOS: E

Intersection Capacity Utilization 91.0%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle



## Lanier Tract DRI

## 10: Dawsonville Highway &amp; Shallowford Rd/Best Buy

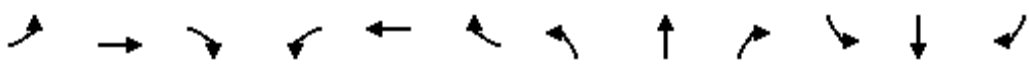
phase two p.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 596                                                                               | 42                                                                                | 29                                                                                | 40                                                                                | 30                                                                                | 8                                                                                 | 44                                                                                  | 1914                                                                                | 126                                                                                 | 8                                                                                   | 1375                                                                                | 531                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | -1%                                                                               |                                                                                   |                                                                                   | 10%                                                                               |                                                                                   |                                                                                     | -4%                                                                                 |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 350                                                                               |                                                                                   | 350                                                                               | 0                                                                                 |                                                                                   | 0                                                                                 | 350                                                                                 |                                                                                     | 150                                                                                 | 265                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 100                                                                               |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             | 0.958                                                                             |                                                                                   |                                                                                   | 0.972                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1723                                                                              | 1738                                                                              | 1623                                                                              | 0                                                                                 | 1754                                                                              | 1534                                                                              | 1841                                                                                | 3682                                                                                | 1647                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             | 0.958                                                                             |                                                                                   |                                                                                   | 0.972                                                                             |                                                                                   | 0.064                                                                               |                                                                                     |                                                                                     | 0.047                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1723                                                                              | 1738                                                                              | 1623                                                                              | 0                                                                                 | 1754                                                                              | 1534                                                                              | 124                                                                                 | 3682                                                                                | 1647                                                                                | 90                                                                                  | 3628                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 106                                                                               |                                                                                   |                                                                                   | 111                                                                               |                                                                                     |                                                                                     | 65                                                                                  |                                                                                     |                                                                                     | 311                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 653                                                                               |                                                                                   |                                                                                   | 178                                                                               |                                                                                   |                                                                                     | 1046                                                                                |                                                                                     |                                                                                     | 778                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 9.9                                                                               |                                                                                   |                                                                                   | 4.9                                                                               |                                                                                   |                                                                                     | 15.8                                                                                |                                                                                     |                                                                                     | 11.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.94                                                                                | 0.94                                                                                | 0.94                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 662                                                                               | 47                                                                                | 32                                                                                | 45                                                                                | 34                                                                                | 9                                                                                 | 47                                                                                  | 2036                                                                                | 134                                                                                 | 9                                                                                   | 1511                                                                                | 584                                                                                 |
| Shared Lane Traffic (%)    | 47%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 351                                                                               | 358                                                                               | 32                                                                                | 0                                                                                 | 79                                                                                | 9                                                                                 | 47                                                                                  | 2036                                                                                | 134                                                                                 | 9                                                                                   | 1511                                                                                | 584                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 0.99                                                                              | 0.99                                                                              | 0.99                                                                              | 1.07                                                                              | 1.07                                                                              | 1.07                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Split                                                                             | NA                                                                                | Perm                                                                              | Split                                                                             | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | Perm                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 3                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 3                                                                                 | 3                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 36.7                                                                              | 36.7                                                                              | 36.7                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                                | 28.8                                                                                | 28.8                                                                                | 30.8                                                                                | 30.8                                                                                | 30.8                                                                                |

# Lanier Tract DRI

## 10: Dawsonville Highway & Shallowford Rd/Best Buy

phase two p.m.

|                         |  |       |       |       |       |       |      |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL  | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 37.0                                                                               | 37.0  | 37.0  | 38.9  | 38.9  | 38.9  | 10.8 | 84.1  | 84.1  | 73.3  | 73.3  | 73.3  |
| Total Split (%)         | 23.1%                                                                              | 23.1% | 23.1% | 24.3% | 24.3% | 24.3% | 6.8% | 52.6% | 52.6% | 45.8% | 45.8% | 45.8% |
| Maximum Green (s)       | 30.3                                                                               | 30.3  | 30.3  | 33.0  | 33.0  | 33.0  | 5.0  | 77.3  | 77.3  | 66.5  | 66.5  | 66.5  |
| Yellow Time (s)         | 4.5                                                                                | 4.5   | 4.5   | 3.0   | 3.0   | 3.0   | 3.0  | 4.9   | 4.9   | 4.9   | 4.9   | 4.9   |
| All-Red Time (s)        | 2.2                                                                                | 2.2   | 2.2   | 2.9   | 2.9   | 2.9   | 2.8  | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.7                                                                                | 6.7   | 6.7   |       | 5.9   | 5.9   | 5.8  | 6.8   | 6.8   | 6.8   | 6.8   | 6.8   |
| Lead/Lag                | Lead                                                                               | Lead  | Lead  | Lag   | Lag   | Lag   | Lead |       |       | Lag   | Lag   | Lag   |
| Lead-Lag Optimize?      | Yes                                                                                | Yes   | Yes   | Yes   | Yes   | Yes   | Yes  |       |       | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None | C-Min | C-Min | C-Min | C-Min | C-Min |
| Walk Time (s)           | 4.0                                                                                | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 26.0                                                                               | 26.0  | 26.0  | 29.0  | 29.0  | 29.0  |      | 18.0  | 18.0  | 20.0  | 20.0  | 20.0  |
| Pedestrian Calls (#/hr) | 0                                                                                  | 0     | 0     | 0     | 0     | 0     |      | 0     | 0     | 0     | 0     | 0     |
| Act Effect Green (s)    | 30.3                                                                               | 30.3  | 30.3  |       | 12.6  | 12.6  | 98.7 | 97.7  | 97.7  | 87.1  | 87.1  | 87.1  |
| Actuated g/C Ratio      | 0.19                                                                               | 0.19  | 0.19  |       | 0.08  | 0.08  | 0.62 | 0.61  | 0.61  | 0.54  | 0.54  | 0.54  |
| v/c Ratio               | 1.08                                                                               | 1.09  | 0.08  |       | 0.57  | 0.04  | 0.31 | 0.91  | 0.13  | 0.19  | 0.77  | 0.57  |
| Control Delay           | 130.7                                                                              | 133.6 | 0.4   |       | 86.5  | 0.4   | 18.2 | 34.6  | 7.5   | 55.5  | 56.2  | 34.0  |
| Queue Delay             | 1.2                                                                                | 1.2   | 0.0   |       | 0.0   | 0.0   | 0.0  | 46.4  | 0.0   | 0.0   | 36.0  | 0.8   |
| Total Delay             | 131.9                                                                              | 134.9 | 0.4   |       | 86.5  | 0.4   | 18.2 | 81.0  | 7.5   | 55.5  | 92.2  | 34.9  |
| LOS                     | F                                                                                  | F     | A     |       | F     | A     | B    | F     | A     | E     | F     | C     |
| Approach Delay          |                                                                                    | 127.7 |       |       | 77.7  |       |      | 75.2  |       |       | 76.1  |       |
| Approach LOS            |                                                                                    | F     |       |       | E     |       |      | E     |       |       | E     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 91 (57%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.09

Intersection Signal Delay: 83.2

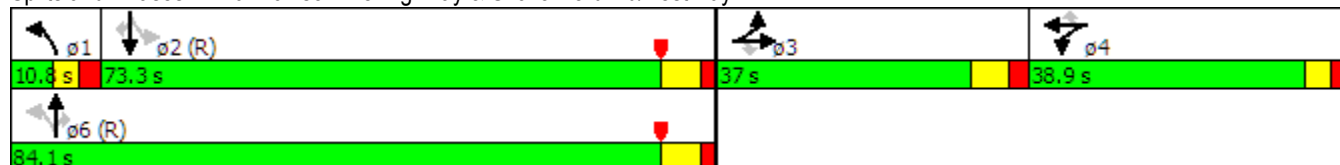
Intersection LOS: F

Intersection Capacity Utilization 90.9%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 10: Dawsonville Highway & Shallowford Rd/Best Buy





Cyril Pcolinsky  
2200 Sportsman Club Road  
Gainesville, GA 30501

Date: March 12, 1917

City of Gainesville Development Department  
Gainesville Planning and Appeals Board  
Post Office Box 2496  
Gainesville, GA 30501-2496

**Dear Planning and Appeals Board;**

We object to a request from Oak Hall Companies, LLC to annex into City of Gainesville and rezone from current PRD Hall County to PUD City of Gainesville a 26.16 acres tract located east of Dawsonville Highway and on the north side of the intersection of Strickland Drive and Sportsman Club Road with road frontage on Karen Lane.

The above mentioned area is currently a part of and effectively lies within the area that is populated exclusively by single family homes, either existing or planned. The simple rule of one single family home/housing unit per one lot is clearly visible in all directions, on all neighboring properties.

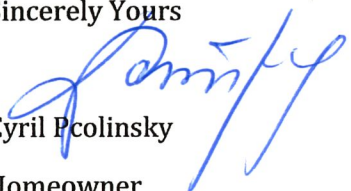
This planned change would in effect create an enclave of high density urban development in the very midst of much more relaxed residential area consisting exclusively of single family homes and as such it would create a sharp and unacceptable contrast with the existing character and development pattern of the existing residential area.

This is not an organic growth of urban development into an area naturally neighboring with the other previously existing high density urban area. This is an arbitrary decision of the developer to maximize the use and benefit from the above mentioned area without any regard to its current character.

The planned development of "Active Adult Community" with its intended multiple-housing unit of condominium style buildings creates unacceptable increase in density, and will no doubt have serious negative impact on both the quality of life as well as market value of all neighboring properties.

We therefore ask Hall County Planning and Zoning department and City of Gainesville Community Development Department and Appeals Board to repeal this request from Oak Hall Companies, LLC.

Sincerely Yours

  
Cyril Pcolinsky

Homeowner



REVISED 2017-04-17

**RESERVATION OF CONSTITUTIONAL AND LEGAL RIGHTS**

|                             |                                                                                                                                                          |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Applicant:</b>           | <b>Oak Hall Companies, LLC</b>                                                                                                                           |
| <b>Annexation Property:</b> | <b>26.16 Acres Designated as Hall County Tax Parcel(s):<br/>00109B000001, 00109003004, 00109003005, and<br/>00109003001, 00109B000002A, 00109B000036</b> |
| <b>Current Zoning:</b>      | <b>PRD</b>                                                                                                                                               |
| <b>Proposed Zoning:</b>     | <b>PUD</b>                                                                                                                                               |
| <b>Proposed Use:</b>        | <b>Planned Unit Development, with 90 Age-Restricted, Single-Family Attached Dwellings (townhouses)</b>                                                   |
| <b>ROW Access:</b>          | <b>Karen Lane</b>                                                                                                                                        |

This Reservation of Constitutional and Other Legal Rights (“the Reservation”) is intended to supplement and form a part of the annexation and rezoning application (including any request for zoning, conditional use permit and variances)(the “Application”) of the Applicant and the owners of the Subject Property and to put the City of Gainesville on notice of the Applicant’s assertion of its constitutional and legal rights.

The Applicant has filed a timely application, has provided all required information and has submitted the appropriate application fees. The application meets all judicial and statutory requirements for approval.

The Current Zoning of the Subject Property is unconstitutional in that it affords no reasonable use of the Subject Property and no resulting benefit to the public from designation under this zoning classification. The Applicant and the owners of the Subject Property have filed the Application to remedy this unconstitutionality.

A refusal by the City of Gainesville to approve the Application, as requested by the Applicant, will impose a disproportionate hardship on the Applicant and owners of the Subject Property without benefiting any surrounding property owners. There is no reasonable use of the Subject Property under any other zoning classification and no resulting benefit to the public from designation to any other classification.

Any provisions in the City of Gainesville Unified Land Development Code (the “ULDC”) that classify, or may classify, the Subject Property into any non-requested zoning classification or zoning classification that does not permit the Proposed Use as a matter of right, or at a density less than as requested by the Applicant, are, or will be, unconstitutional in that they will constitute a taking of the Applicant’s and owners’ property rights without first paying fair, adequate, and just compensation for such rights in violation of Article I, Section III, Paragraph I of the Georgia Constitution of 1983, as amended, and the Fifth and Fourteenth Amendments to the Constitution of the United States.

The Subject Property is suitable for development under the Proposed Zoning district requested by the Applicant and it is not suitable for development under any other zoning classification, including without limitation the Current Zoning category of the Subject Property, or at a density or use less than that requested by the Applicant. A denial of the Application, as requested by the Applicant, will constitute an arbitrary and capricious act by the City of Gainesville without any basis for such, and will constitute an abuse of discretion in violation of Article I, Section

Page 2 of 2  
April 17, 2017

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I, Paragraph I of the Georgia Constitution of 1983, as amended and the Due Process Clause of the Fifth and Fourteenth Amendments to the Constitution of the United States.

A refusal by the City of Gainesville to approve the Application, as requested by the Applicant, will prohibit the only viable economic use of the Subject Property, will be unconstitutional and will discriminate in an arbitrary, capricious and unreasonable manner between the Applicant and owner and the owners of similarly situated properties in violation of Article I, Section I, Paragraph II of the Georgia Constitution of 1983, as amended and the Equal Protection Clause of the Fourteenth Amendment to the Constitution of the United States.

The City of Gainesville cannot lawfully impose more restrictive standards on the Subject Property's development than are presently set forth in the ULDC. To do so will constitute a taking of the Subject Property as set forth above, and also amount to an unlawful delegation of the Board's authority in response to neighborhood opposition, in violation of Article IX, Section II, Paragraph IV of the Georgia Constitution of 1983, as amended. Any zoning conditions or other restrictions imposed on the Subject Property without the consent of the Applicant and property owners that do not serve to ameliorate the negative impacts of the development are invalid and void. As such, the Applicant and owners reserve the right to challenge any such zoning conditions and other restrictions. The Applicant and owners also reserve the right to challenge any unlawful exactions, whether they are in the form of illegal impact fees or otherwise.

Furthermore, this Reservation also constitutes an Ante Litem Notice pursuant to O.C.G.A. § 36-11-1, which places the City of Gainesville and all other agents of the City on notice of the Applicant's and owners' intent to seek monetary damages and attorney's fees against the City of Gainesville for any rezoning action, zoning condition, illegal impact fee and any other unlawful restrictions and exactions that are imposed on the Subject Property, the Applicant and the owners.

Finally, the Applicant and owners assert that the ULDC, Future Development Map and Comprehensive Plan were not adopted in compliance with the laws or constitutions of the State of Georgia or of the United States, and a denial of the Applicant's request based upon provisions illegally adopted will deprive the Applicant and owners of due process under the law.

By filing this Reservation, the Applicant reserves all rights and remedies available to it under the United States Constitution, the Georgia Constitution, all applicable federal, state, and local laws and ordinances, and in equity.

The Applicant and owners respectfully request that this Application be approved as requested by the Applicant and in the manner shown on the Application, which is incorporated herein by reference. This Reservation forms an integral part of the Application, and we ask that the City of Gainesville include this Reservation with the Applicant's other application documents. The Applicant and owners reserve the right to amend and supplement this Reservation at any time.

Sincerely,



Ethan Underwood,  
Attorney for the Applicant

# CITY OF GAINESVILLE

## AGENDA REQUEST

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**Date Submitted:** 4/25/2017

**Presenter:** Matt Tate

**Item of Business:** Request from **Oak Hall Companies, LLC** to annex a 50.81± acres tract located on the east side of Dawsonville Highway (S.R. 53), having road frontage on Dawsonville Highway, Ahaluna Drive, Skyview Drive and Strickland Drive (a/k/a **0 and 1758 Ahaluna Drive; 1508, 1550, 1740, 1746, 1758, 1760, 1934 and 1982 Dawsonville Highway; 300 and 301 Skyview Drive; 0, 2008 and 2016 Strickland Drive**) and to establish zoning as Planned Unit Development (P-U-D) and General Business (G-B).  
Ward Number: One  
Tax Parcel Number(s): 00-110-000-005 (part), 028, 032 (part) and 039;  
00-110A-004-001 (part), 002A, 004 (part), 005 (part), 007 (part),  
007A (part), 007X, 014 (part), 016 (part), 017 (part) and 018  
Request: Mixed-use development

**Meeting Date:** 5/9/2017

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### **Purpose of Request:**

The applicant is proposing to annex the subject property with a zoning of Planned Unit Development (P-U-D) and General Business (G-B) and is to be included as part of the overall 208.79± acres proposed mixed-use development. The property is currently zoned Agricultural Residential-III (AR-III), Residential-II (R-II) and Highway Business (H-B) within unincorporated Hall County. The city limits are contiguous to the subject property to the north, south, east and west. The property contains numerous residential, commercial structures, out buildings and a cellular tower. The proposed development includes a total of 790 age restricted units of which most of the units are to be restricted for adults age 55 and up. The mixture of housing proposed includes: 305 single-family detached homes; 79 single-family cottages; 81 detached terrace homes; 175 independent living units and 150 assisted living units which could include up to 30 memory care units. In addition, an amenity area is proposed to include a swimming pool, tennis courts, club house, passive park and two community docks totaling 130 boat slips and a 40,000 square foot storage facility to be utilized by residents of the community. Other uses are to include 24,000 square feet of retail/office/restaurant, seven commercial parcels and land reserved for a future fire station. Access is proposed from Dawsonville Highway, Ahaluna Drive and Strickland Drive.

### **History/Background:**

All three **Oak Hall Companies, LLC** agenda items were tabled at the March 14, 2017 PAB meeting after staff reviewed the requests and determined that the applicant needed to provide additional traffic data prior to staff giving an official recommendation. Therefore, PAB tabled the items for a period of 60-days to be scheduled for the May 9, 2017 Planning and Appeals Board meeting.

### **Facts & Issues for Consideration:**

#### **Department Recommendation:**

Planning staff is recommending approval with twenty-four conditions.

#### **Department Director:**

Rusty Ligon

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#### **If funding is involved, are funds approved within the current budget?**

N/A

#### **Amount Requested:**

#### **Source of Funds:**

#### **Finance Comments:**

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**Administrative Comments:**

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**ATTACHMENTS:**

| Description              |                                      | Type            |
|--------------------------|--------------------------------------|-----------------|
| <input type="checkbox"/> | Staff Report                         | Report          |
| <input type="checkbox"/> | Location Maps                        | Backup Material |
| <input type="checkbox"/> | Narrative                            | Backup Material |
| <input type="checkbox"/> | Survey                               | Backup Material |
| <input type="checkbox"/> | Concept Plan                         | Backup Material |
| <input type="checkbox"/> | Elevations and Floor Plans           | Backup Material |
| <input type="checkbox"/> | Traffic Impact Study                 | Backup Material |
| <input type="checkbox"/> | Letter of Opposition                 | Backup Material |
| <input type="checkbox"/> | Reservation of Constitutional Rights | Backup Material |

**GAINESVILLE PLANNING and APPEALS BOARD  
STAFF RECOMMENDATION**

**Applicant** ..... Oak Hall Companies, LLC

**Property Owners** ..... America's Home Place, Inc.; West Ahaluna, LLC; Barry Conner, LLC; Soque, LLC; Olen Stephens

**Location** ..... See below

**Request** ..... Annex 50.81<sup>±</sup> acres with Planned Unit Development (PUD) and General Business (G-B) zoning

**Request** ..... Rezone 157.98<sup>±</sup> acres from Residential-I-A (R-I-A), Residential-I (R-I), Planned Unit Development (P-U-D) and Regional Business (R-B) to Planned Unit Development (P-U-D) and General Business (G-B)

**Total Acres** ..... 208.79<sup>±</sup> acres total

**Ward** ..... One

**Proposed Use** ..... Mixed-use, age-restricted community

**Planning Division Staff Recommendation** ..... **Approval, with conditions**

**Date** ..... May 9, 2017

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▪ **Location**

50.81<sup>±</sup> acres annexation - 0 and 1758 Ahaluna Drive; 1508, 1550, 1740, 1746, 1758, 1760, 1934 and 1982 Dawsonville Highway; 300 and 301 Skyview Drive; 0, 2008 and 2016 Strickland Drive

157.98<sup>±</sup> acres rezoning - 0, 1264 and 1817 Ahaluna Drive; 1876 Dawsonville Highway; 2208 Karen Lane; 0 and 2029 Strickland Drive; 0 and 1489 West Lake Drive

▪ **Applicant's Proposal and Background Information**

A 110.9<sup>±</sup> acres portion of the subject property was annexed and rezoned in 2014 and 2015 to Planned Unit Development (P-U-D) and Residential-I-A (R-I-A) with conditions for a 199 lot single-family subdivision. The applicant at that time was West Ahaluna, LLC and the property has remained undeveloped.

The current proposal includes the annexation of 50.81<sup>±</sup> acres and the rezoning of 157.98<sup>±</sup> acres for a total of 208.79<sup>±</sup> acres. Of the total acreage, 185.02<sup>±</sup> acres will be zoned Planned Unit Development (P-U-D) and 23.77<sup>±</sup> acres zoned as General Business (G-B). Because the proposal is a master planned mixed-use development, both the annexation and rezoning requests are being presented together.

The subject 50.81<sup>±</sup> acres portion of property is being considered for annexation with a zoning of Planned Unit Development (P-U-D) and General Business (G-B). The property is currently zoned Agricultural Residential-III (AR-III), Residential-II (R-II) and Highway Business (H-B) within

unincorporated Hall County. Of the 50.81<sup>±</sup> acres, approximately 30.80<sup>±</sup> acres will be zoned P-U-D and 20.01<sup>±</sup> acres will be zoned G-B. The city limits are contiguous to the subject property to the north, south, east and west. The property contains numerous residential and commercial structures, out buildings and a cellular tower and has road frontage on Ahaluna Drive, Dawsonville Highway, Strickland Drive and Skyview Drive.

The subject 157.98<sup>±</sup> acres portion of property is being considered for rezoning from Residential-I-A (R-I-A), Residential-I (R-I), Planned Unit Development (P-U-D) and Regional Business (R-B) to Planned Unit Development (P-U-D) and General Business (G-B). This property is currently located within the city limits. Of the 157.98<sup>±</sup> acres, approximately 154.22<sup>±</sup> acres will be zoned P-U-D and 3.76<sup>±</sup> acres will be zoned G-B. The property contains mostly undeveloped land with the exception of four single-family homes and has road frontage on Ahaluna Drive, Dawsonville Highway, Karen Lane, Strickland Drive and West Lake Drive, and is west of the terminus of Lakeshore Circle.

The development proposes a master planned development designed as an “age in place” community. The applicant anticipates the residential portion of the development will be built-out over a period of 6 years from when the first land development permit is issued. The office and commercial component of the development will be constructed upon market conditions. A total of 790 residential units are proposed that will comply with applicable U. S. Department of Housing and Urban Development (HUD) rules for age-restricted communities. The mixture of housing proposed includes: 305 single-family detached homes; 79 single-family cottages; 81 detached terrace homes; 175 independent living units and 150 assisted living units which could include up to 30 memory care units. Therefore, 37% of the overall residential units for the entire development are located within the independent and assisted living facilities. Amenities are to consist of a swimming pool, club house, passive park and two community docks totaling 130 boat slips. A total of 68.0 acres or 37% of the development will be open green space.

Non-residential uses are to include a 40,000 square foot storage facility for residents within the community, 24,000 square feet of retail/office/restaurant space, seven commercial parcels each having approximately 8,000 square feet of building space and a 3.0 acres tract of land reserved for a 10,650<sup>±</sup> square foot fire station. Access is proposed from Dawsonville Highway, Ahaluna Drive and Strickland Drive. Some of the proposed development standards are listed below. A full description is provided with the application.

#### Residential

- Proposed Density: 4.43 units/acre
- Average home price: Single-family- \$400,000 to \$700,000; Terrace homes- \$300,000; Cottages- High \$200,000; Independent Living- \$2,800 to \$4,000 per month.
- Proposed Minimum House Size: 1,500 square feet of heated floor space for single-family detached homes; 500 square feet of heated floor space for single-family cottages; and 1,100 square feet attached / detached terrace homes.
- Building Materials: No vinyl or aluminum siding allowed. Exterior facade may include brick, stone, hard coat stucco, hardiboard or a combination thereof. Accent material such as copper roofing, cedar shake, hardiboard or a combination of such materials may be used not to exceed 50% of the facade. Roofing materials may include cedar shake, architectural shingles or metal as appropriate to the architectural style of each home.
- Lot Width: Single-family detached homes - 40 feet (83<sup>±</sup> lots); 50 feet (126<sup>±</sup>-lots); 60 feet (56<sup>±</sup> lots); 80 feet (40<sup>±</sup> lots).
- Unit Width: Cottage homes- Minimum 15 feet, Terrace homes- Minimum 24 feet.
- Maximum Height: Single-family detached- 40-feet; Cottage homes and Terrace homes- 30-feet; Independent Living, Assisted Living and Memory Care- 75-feet.

- Setbacks: Each unit will have a minimum of 18-feet of driveway from the back of the sidewalk to the building face or 20-feet from the back of the curb when there is no sidewalk.  
Single-family detached- Front: 15-feet; Side: 3-feet; Rear interior lot: 10-feet; Cottages homes and Terrace homes – Front, Side and Interior Rear will have zero foot (0') lot lines; Minimum of 10-feet of building separation.  
Independent Living, Assisted Living and Memory Care- Front: 40-feet; Side: 20-feet; 25-foot interior rear and 50-foot exterior rear.
- Water and Sewer: Provided by the City of Gainesville. When all phases are complete, water will be looped from Ahaluna Drive to Strickland Drive. Sewer will require several pump stations with gravity to Dawsonville Highway which has ample capacity.
- Streets: All interior streets and driveways are proposed to be publically owned and maintained. 50-foot right-of-way widths; 24-foot pavement widths; 4-foot wide sidewalks on at least one side of each residential road. It is intended that the side streets serving the cottages, terrace homes and the Independent / Assisted Living will be private.
- Parking: Each single-family detached home and terrace home will have a 2 car garage; Cottage homes will have surface parking for two vehicles.
- Garbage Pickup: Provided by the City of Gainesville.

#### Commercial

- Maximum building coverage: 70% of lot
- Maximum building height: 75-feet
- Minimum landscaped open space: 10%
- Minimum front landscape strip: 10-feet; Side and rear landscape strip: 6-feet
- Setbacks: Front: 40-feet from the right-of-way; Side: 10-feet; Interior rear: 25-feet; Adjacent to residential use: 50-feet
- Minimum Parking: City of Gainesville standards for use.
- Building Materials: Building exteriors not screened from view of a public right-of-way or any property line shall have an architectural treatment of brick, brick/frame, stone, stucco, or another architectural treatment approved by the Community Development Director.

#### ▪ **Adjacent Land Use and Zoning**

The subject property is positioned near the northwestern edge of the city limits between Dawsonville Highway (S.R. 53) and Lake Sidney Lanier. The property fronting Dawsonville Highway (SR 53) is located within the Gateway Corridor Overlay Zone. Single-family homes and undeveloped land surround the subject property to its north, south and east, some of which are located off of Ahaluna Drive, Watauga Drive, Sportsman Club Road, Strickland Drive, Karen Lane and within the Lakeshore Heights Subdivision. These properties are zoned Residential-I (R-I) within the City of Gainesville and Agricultural Residential-III (AR-III), Residential-I (R-I) and Vacation Cottage (V-C) within Hall County. There are also single-family homes to the west located off Skyview Place in the City zoned Residential-I (R-I) as well as Skyview Lane and Skyview Drive zoned Agricultural Residential-III (AR-III) in the County.

Commercial properties can be found to the north, south and west located along Dawsonville Highway. These properties include various retail stores, restaurants, convenience store/gas station, mini warehouses, boat sales, boat dock manufacturing and multi-family apartments. These properties are zoned Highway Business (H-B) within Hall County and General Business (G-B), Regional Business (R-B), Residential-II (R-II) and Planned Unit Development (P-U-D) within Gainesville. Recent significant development includes the Northlake Square shopping center and several outparcel developments located to the south zoned General Business (G-B) within the City of Gainesville.

## ▪ **Traffic Impact Study Summary**

A Traffic Impact Study was completed for the proposed development on January 24, 2017 and later revised on April 7, 2017 by Marc R. Acampora, PE, LLC Traffic Engineering. Most of the traffic counts were collected on Thursday, November 17, 2016 from 7:00 A.M to 9:00 A.M. and from 4:30 P.M. to 6:30 P.M. The counts at the North Lake Square entrance were collected on Wednesday, March 22, 2017. The magnitude of the side street volumes were found to be very comparable with the counts performed for this current study, and generally slightly higher. However, the volumes on the major streets were consistently notably higher for this current study. Historic Georgia DOT 24-hour traffic counts were also collected in the vicinity from the year 2015. The annual daily traffic volume on SR 53 north of Sportsman Club Road was 25,600 vehicles per day. The entire project is expected to generate 189 new trips in the a.m. peak hour, 274 new trips in the p.m. peak hour, and 3,387 new trips during a 24-hour weekday. The study extended one mile from the limits of the proposed site and included the following nine intersections:

1. Sportsman Club Road at Strickland Drive
2. Dawsonville Highway at Sportsman Club Road
3. Dawsonville Highway at Avonlea Way
4. Dawsonville Highway at Canterbury Road
5. Dawsonville Highway at Ahaluna Drive
6. Dawsonville Highway at North Lake Square Shopping Center Entrance
7. Dawsonville Highway at Beechwood Boulevard
8. Dawsonville Highway at McEver Road
9. Dawsonville Highway at Green Hill Circle
10. Dawsonville Highway at Shallowford Road

A summary of the study revealed that future operations, upon the project being fully constructed and operational, at the below intersections would have extremely heavy traffic flows rated LOS F. LOS "F" is a condition of extremely heavy flow, with frequent stoppage and very slow speeds. Traffic is unstable and often comes to a complete halt. These intersections include:

1) A.M. and P.M. peak hour southbound approach at Dawsonville Highway at Sportsman Club Road; 2) A.M. and P.M. peak hour eastbound and westbound left turn at Dawsonville Highway and Avonlea Way; 3) A.M. and P.M. peak hour eastbound and westbound left turn at Dawsonville Highway and Canterbury Road; 4) A.M. and P.M. peak hour westbound approach at Dawsonville Highway and Ahaluna Drive; 5) A.M. and P.M. peak hour eastbound left turn at Dawsonville Highway and Beechwood Boulevard; 6) P.M. peak hour northbound Dawsonville Highway at McEver Road; 7) A.M. / P.M. peak hour eastbound approach at Dawsonville Highway and McEver Road; 8) P.M. peak hour westbound approach at Dawsonville Highway at Green Hill Circle; and 9) P.M. peak hour eastbound approach at Dawsonville Highway and Shallowford Road.

The summary of findings and recommendations of the study are as follows:

### **Sportsman Club Road at Strickland Drive**

No changes are recommended at this intersection for the existing, no-build, or Future Phase One and Future Phase Two conditions.

### **Dawsonville Highway at Sportsman Club Road**

The side street delays at this intersection are significant now and will increase in the future. 1) While a warrant analysis was not performed as part of this traffic impact study, the low side street volumes make the intersection an unlikely candidate for signalization. The potential for justifying



signalization will increase in the future, but side street volumes will continue to remain moderate. 2) This study also identifies the need for a northbound exclusive right turn lane to be added on GA 53 at Sportsman Club Road. Northbound and southbound exclusive left turn lanes are currently provided at this median break.

#### **Dawsonville Highway at Avonlea Way**

Side street delays are high at the existing eastbound approach of Avonlea Way, and these delays will increase in the no-build and future conditions. The side street volumes are predominately right turners, with extremely low left turn volumes. 1) The Lanier Tract will introduce a new fourth leg at the Avonlea Way intersection (there is an existing private residential driveway at this median break, which would be replaced by the Lanier Tract access). Northbound and southbound exclusive left turn lanes are currently provided at this median break. The volumes exiting the new Lanier Tract access will be low and many of them will be right turners. Therefore, this intersection is considered unlikely to be a candidate for signalization in the existing, no-build, and Future Phases One and Two, even with the addition of the Lanier Tract trips. 2) The Georgia DOT right turn lane analysis suggests that a northbound exclusive right turn lane should be considered at this access and the site plan includes the addition of this lane. 3) The new site access should be constructed with one entering lane and one exiting lane. 4) The side street approach exiting the site should be controlled by side street stop sign and accompanying stop bar.

#### **Dawsonville Highway at Canterbury Road**

Side street delays are high on the existing eastbound approach of Canterbury Road and these delays will increase in the no-build and future conditions. As with Avonlea Way, the side street volumes at this intersection are predominately right turners, with extremely low left turn volumes. For this reason, this intersection is considered an unlikely candidate for signalization in the existing, no-build, and Future Phase One conditions. The outparcel access will align with Canterbury Road and the Lanier Tract will connect through the outparcels to GA 53 at this location. Northbound and southbound exclusive left turn lanes are currently provided at this median break. A short southbound deceleration lane is provided on GA 53 at Canterbury Road, though this lane does not appear to have been constructed to current Georgia DOT design standards. The northbound right turn volume will be low in the Future Phase One condition, and the Georgia DOT right turn lane analysis indicates that no decel lane will be required for Future Phase One. 1) However, with the future development of the retail outparcels, by others, the right turn volumes will be significant, primarily due to the outparcels, and a northbound deceleration lane is recommended for this location. The Future Phase Two side street volumes exiting the outparcels will be notable and this intersection will likely be a prime candidate for signalization upon development of the outparcels. 2) It is recommended that at such time as the outparcels are planned to be developed, a signal warrant study be performed for this intersection according to the standards set forth in the Federal Highway Administration's *Manual On Uniform Traffic Control Devices* (MUTCD). 3) This new access at the Canterbury Road median break should be constructed with at least one entering lane and an exiting shared left/through lane and an exclusive right turn lane. The two westbound lanes are in anticipation of the development of the outparcels. With only the Lanier Tract volumes, only one entering and one exiting lane would be required. 4) Until signalization is warranted, the side street approach exiting the outparcel tracts should be controlled by side street stop sign and accompanying stop bar.

#### **Dawsonville Highway at Ahaluna Drive**

1) The review of Georgia DOT auxiliary lane standards indicates that a northbound right turn lane should be added on GA 53 at Ahaluna Drive in the existing condition. 2) The future volumes exiting Ahaluna Drive would benefit from the addition of a second westbound lane, resulting in a shared left/through lane and an exclusive right turn lane on Ahaluna Drive at GA 53. This second lane would reduce the demand for side street green time on the signal and improve side street

levels of service. It was noted that the need for relocation of the signal steel strain pole, a drainage structure, and possibly a large brick monument sign, may reduce the feasibility of adding this second westbound lane. 3) With the addition of Lanier Tract DRI southbound left turns, consideration should be given to adding a protected / permissive southbound left turn phase, which would match the existing protected / permissive phasing for the northbound left turn. The Georgia DOT left turn phase warrants are not satisfied for this southbound left turn based on volume projections alone. However, other factors such as high speeds on GA 53 and the senior residents expected to reside at the Lanier DRI, merit consideration. 4) Field observations suggest that there may be an opportunity to shorten the cycle length, which would reduce time spent by vehicles waiting on the side street.

#### **Dawsonville Highway at North Lake Square Access**

This intersection operates acceptably in all analysis conditions. The side street approaches do incur some delays at all times, primarily due to the long cycle length on the signal, which allocates most of the green time, appropriately, to GA 53. The side street delays are incurred by minimal volumes in the a.m., since the retail served by the side streets are generally not operational at that time. Higher volumes incur the side street delays in the p.m., when the retail is operational. However, overall this intersection operates appropriately and no mitigation is recommended for any analysis condition.

#### **Dawsonville Highway at Beechwood Boulevard**

At the GA 53 / Beechwood Boulevard intersection, it is noted that a fourth leg is currently stubbed-out across from Beechwood Boulevard and a retail development is under construction on that site. Auxiliary left and right turn lanes are provided on GA 53 serving Beechwood Boulevard and the future fourth leg appears to be designed for right-in / right-out access only, with a northbound deceleration lane provided on GA 53. No other changes are recommended at this intersection based on this study.

#### **Dawsonville Highway at McEver Road**

The lane configuration and signal phasing at this intersection are generally appropriate. 1) The existing southbound right turn volume is sufficiently-high (828 a.m., 481 p.m.) to merit consideration of the addition of a second exclusive right turn lane and/or the addition of a protected right turn overlap phase. The justification for adding this phasing and/or second right turn lane will increase as volumes increase. 2) Finally, there may be an opportunity to reduce the cycle length and fine-tune the signal timing at this intersection.

#### **Dawsonville Highway at Green Hill Circle**

This signalized intersection incurs high side street delays, again, due to the allocation of the majority of green time to the Dawsonville Highway approaches. 1) There may be an opportunity to reduce the cycle length and fine-tune the signal timing at this intersection.

#### **Dawsonville Highway at Shallowford Road**

The lane configuration and signal phasing are appropriate for this intersection. 1) Reduction of the cycle and optimization of the allocation of green time could reduce delays and queuing at this intersection.

#### **▪ Other Departmental Comments**

According to the Georgia Department of Transportation, the applicant will need to coordinate with GDOT since this develop will impact the State Route System.

The Gainesville Public Works Department has recommended additional transportation improvements which are stated within the traffic zoning conditions listed below.

The Gainesville Department of Water Resources states that the City currently has adequate water and sanitary capacity for the proposed development. The developer will be required to construct extensions for both water and sanitary sewer to connect the existing City facilities, along with pump stations required for areas of the development unable to utilize gravity sanitary sewer for conveyance.

The Gainesville Police Department's primary concern will be the increased traffic accidents from the additional cars on the Dawsonville Highway corridor.

A Development of Regional Impact Study (DRI #2638) was submitted for this development. Upon review of the proposal, the Georgia Mountains Regional Commission states that the proposal does not present any potential adverse inter-jurisdictional impacts, assuming the project will be in compliance with State and local regulations and the Gainesville-Hall Metropolitan Planning Organization.

▪ **Zoning History**

*The following zoning actions have taken place in the immediate area during the last ten years:*

**2015** – A request by West Ahaluna, LLC to annex a 8.74± acres tract with a zoning of Residential-I-A (R-I-A) located at 0 and 1264 Ahaluna Drive was conditionally approved for no proposed use.

**2014** – A request by West Ahaluna, LLC to annex a 70.23± acres tract with a zoning of Planned Unit Development (P-U-D) located at 0 and 1817 Ahaluna Drive; 1982 Dawsonville Highway; 2208 Karen Lane; 2008, 2016 and 2029 Strickland Drive was approved with conditions. In addition, the same applicant requested to rezone a 31.93± acres tract located at 0 Ahaluna Drive NW and 1489 West Lake Drive NW from Residential-I (R-I) to Planned Unit Development (P-U-D) was also approved with conditions for a 199-lot single-family subdivision.

**2013** – A request by America's Home Place, Inc. to rezone a 25.11± acres tract located at 0 and 1198 Dawsonville Highway; 1232 Ahaluna Drive and 1162 Lakeshore Circle from Residential-I (R-I), Residential-II (R-II) and Office and Institutional (O-I) to General Business (G-B) zoning for a commercial shopping center was approved with conditions.

**2012** – A request by America's Home Place, Inc. to rezone a 4.711± acres tract located at 0, 1122, 1138, 1162 and 1198 Dawsonville Highway from Residential-II (R-II), Office and Institutional (O-I) and General Business (G-B) to General Business (G-B) zoning for retail, restaurant and vehicle service uses was approved with conditions.

**2011** – A request by Kauffman Tire Inc. for a special use within Regional Business (R-B) zoning on a 1.19± acres tract located at 801 & 805 Dawsonville Highway was approved with conditions for an automotive tire and service store.

**2010** – A request by Bill Dupree to annex a 7.11± acres tract with General Business (G-B) zoning and rezone a 2.44± acres tract from Residential-II (R-II) to General Business (G-B) located at 0, 1293, 1297 and 1139 Dawsonville Highway was approved with conditions for a business center with retail, office and restaurant uses.

▪ **Staff Analysis**

**(1) Is the proposed use suitable in view of the zoning and development of adjacent and nearby property?**

The proposed mixed-use development is suitable based on the surrounding uses. The subject property is located adjacent to both residential and commercial uses with zonings of Agricultural Residential-III (AR-III), Residential-I (R-I), Vacation Cottage (V-C), Planned Unit Development (P-U-D), Highway Business (H-B), General Business (G-B) and Regional Business (R-B). Much of the development within the immediate area has included significant commercial growth with some limited new housing.

**(2) Will the proposed use adversely affect the existing use or usability of adjacent or nearby property?**

The subject property is currently zoned and approved for residential and commercial purposes. The proposed development is master planned and proposes more residential housing.

Given the size of the property, it is expected the proposed mixed-use development will have impacts to traffic movements along Dawsonville Highway which are currently strained during the holiday period and certain peak times. As the proposed development becomes built out over time, additional traffic will slow turning movements at some nearby Dawsonville Highway intersections. Transportation improvements as identified within the traffic study and zoning conditions will be necessary to help reduce negative impacts to Dawsonville Highway and nearby intersections. Of note, with the proposed residents being mostly age restricted, the traffic created is typically less than if proposed as a traditional subdivision.

In addition, due to the proposed developments proximity to Lake Lanier, environmental impacts should be properly mitigated through improved storm water measures. Sedimentation ponds and bioretention areas will be required within the development to help protect the lake. In addition, the Corps of Engineers will require the applicant to install rip rap to protect the shoreline near the proposed two community boat docks due to the additional boat traffic.

**(3) Is the proposed use compatible with the purpose and intent of the Comprehensive Plan?**

The Gainesville Future Development Map places the subject property within the *Low-Medium Density Residential* land use category and the *Mixed Use General* land use category. The *Low-Medium Density Residential* land use category includes areas containing or planned for single-family detached or semi-detached housing at densities up to 4.0 dwelling units per acre. The proposal has a density of 4.27 dwelling units per acre for the 185.02± acres portion of property to be zoned Planned Unit Development (P-U-D). The *Mixed Use General* land use category includes areas containing or planned for a mixture of land uses including office, neighborhood retail, and residential.

The subject property is also located within the *Suburban Residential* and *Suburban Commercial* Character Areas. The goal of this character area is to preserve older, stable residential subdivisions and encourage newer projects with smaller lot sizes, pedestrian infrastructure, and buildings patterned after traditional local housing, possibly containing a small neighborhood-serving "village center". Mixed-use neighborhood design is desired but not required. In areas where natural features or sensitive environments are important, cluster housing or conservation subdivision design may be appropriate. Community access points and shoreline restoration are encouraged as part of future development on greenfield parcels between Dawsonville Highway

and Lake Lanier. Land uses allowed within the *Suburban Residential* area include low-density residential, medium density residential, multi-family residential, public / institutional, commercial, and parks / recreation / conservation and mixed use.

The *Suburban Commercial* area will continue to grow as a regional retail center for the City and Hall County, but should diversify over time to include multi-family housing and a higher-density mix of retail, office, services and high-quality employment. In addition, expanding premium retail could offer a variety of shopping options that are currently not available elsewhere in the City. As it grows, the area will become one of the most prominent commercial corridors and gateways into the City, and a thriving economic anchor for the northwest side. When development occurs, adequate buffers should be maintained around development to protect watersheds and sensitive environments. Land uses allowed within the *Suburban Commercial* area include commercial, public / institutional, multi-family residential and mixed use.

**(4) Are there substantial reasons why the property cannot or should not be used as currently zoned?**

The subject property is currently zoned for single-family and commercial purposes and could be developed as such. It is estimated that a total of 341 residential homes could be constructed within the entire development based on the existing zoning in the City and County. However, water and sewer services are necessary in order to develop the subject property for the desired use and density. Due the amount of undeveloped land and green space, the subject property should be carefully planned as opposed to developed piecemeal. Master planned communities typically provide for better uniformity and higher development standards such as building quality, connectivity, common space, landscaping, environmental protection and services that would otherwise not be provided to the residents.

**(5) Will the proposed use cause an excessive or burdensome use of public facilities or services, including but not limited to streets, schools, water or sewer utilities, and police or fire protection?**

The subject property and surrounding development currently utilizes City water and sewer services and there is sufficient capacity to serve the development. Water and sewer extension to the development will be required.

As listed in the above summarized Traffic Impact Study for this project, the entire project will generate 189 new trips in the a.m. peak hour, 274 new trips in the p.m. peak hour, and 3,387 new trips during a 24-hour weekday. The improvements as identified within the study and the proposed zoning conditions are strongly recommended by staff to help mitigate some of the traffic concerns.

Existing public safety services respond to the adjacent and nearby properties. Gainesville Fire Station #1 is located approximately 3.2 miles away from the furthest proposed residential lot. As well, Hall County Fire Station #13 off of Sardis Road is also located approximately 3.4 miles away. Gainesville and Hall County currently have an “automatic aid” agreement for emergency services that was first established in 1997. The agreement allows the agency that is closest to an incident to respond despite municipal boundaries. Regardless, the amount of proposed single-family homes will put additional strain on fire services due to the subject properties proximity to the existing city limits which could impact the City’s ISO rating. However, a 3.0 acres tract of land is planned for a future City fire station which would front Dawsonville Highway.

According to the Gainesville Police Department, increased traffic accidents from the additional cars on the Dawsonville Highway corridor are a primary concern.

No impacts to the school system are expected as the development is an age restricted community. Of note, a portion of the subject property was previously approved for 199 homes which were not age restricted. No comments or concerns were received by the school system regarding this request.

**(6) Is the proposed use supported by new or changing conditions not anticipated by the Comprehensive Plan or reflected in the existing zoning on the property or surrounding properties?**

It is staff's opinion that proposed mixed-use is consistent with the Gainesville Comprehensive Plan but the number of units should be reduced to be within density range. The property is located within a residential area between Dawsonville Highway and Lake Lanier, and is near Gainesville's most active regional commercial corridors. Existing uses along Dawsonville Highway south of the bridge consists of mostly commercial in nature excluding a few large apartment complex developments (Park Creek, Carrington Park and Lake Lanier Club), and some isolated single-family homes within Hall County. Numerous properties fronting this segment of Dawsonville Highway have been developed for non-residential purposes over the past 15 to 20 years. Some examples of this include the Northlake Square shopping center, Carrington Park retail center, Village Shoppes of Gainesville, Home Depot, Best Buy, McEver Corners shopping center, Texas Roadhouse, Olive Garden, Cheddar's, Buffalo Wild Wings and a child day care facility. A 94-room Holiday Inn Express is currently under construction behind the Cheddars restaurant.

The proposed mixed-use development appears to be of high quality and would serve as an appropriate transitional use for the area between Dawsonville Highway and the residential uses adjacent to Lake Lanier. As well, the proposal will provide for additional shopping opportunities and a mixture of housing needed within Gainesville that will further help sustain the Dawsonville Highway corridor.

**(7) Does the proposed use reflect a reasonable balance between the promotion of the public health, safety, morality, or general welfare and the right to unrestricted use of property?**

Due to the subject property's proximity to existing residential and commercial land uses, the proposed mixed-use development, with the recommended conditions of zoning appears to promote a reasonable balance between the interests of the City, the property owner, and neighboring residents and property owners.

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▪ **Staff Recommendation**

The Planning Division staff is recommending **conditional approval** of the proposed annexation and rezoning request based on the Comprehensive Plan and the adjacent residential and non-residential land uses.

## Conditions

### Development Standards

1. The development standards within the applicant's narrative, concept plan and architectural renderings shall be made part of the zoning ordinance, and shall be subject to the Community Development Director approval. Any zoning conditions adopted as part of this zoning ordinance that conflict with the applicant's narrative, concept plan and architectural renderings shall take precedence over the applicant's development standards.
2. Prohibited commercial uses shall include motels or hotels with rooms accessed from the exterior of the building, adult novelty stores, adult entertainment centers, pawn shops, gas stations, tire stores, massage parlors except for practitioners licensed by the State of Georgia, vaping stores, auto body shops, automobile sale establishments, marine sales or repair stores, automated or non-automated car wash, coin-laundry facilities, truck stop, tattoo parlors, psychics, fortune tellers, clairvoyants and the like.
3. The applicant's revised concept plan and narrative proposes a total of 790 senior residential units. The total number of residential units approved for the development shall not exceed 770 senior residential units. The reduction of 20 residential units may occur anywhere within the development. However, a minimum of 10 residential units shall include single-family homes, cottages and terrace homes with frontage along Ahaluna Drive and adjacent to existing single-family properties located off of Karen Lane, Watauga Drive and West Lake Drive.
4. The development shall comply with applicable U. S. Department of Housing and Urban Development (HUD) rules for age-restricted communities. The organization established for the management of the development shall comply with HUD rules for verification of occupancy and shall maintain procedures for routinely determining the occupancy of each unit. Such procedures may be part of a normal leasing or purchasing agreement and must provide for regular updates as required by HUD.
5. All proposed single-family detached homes shall have a minimum front yard setback of 20-feet as measured from the right-of-way line and shall have a minimum distance of 10-feet between houses. Additionally, all cottages with frontage along Ahaluna Drive shall have a minimum front yard setback of 20-feet as measured from the right-of-way line and shall have a minimum distance of 10-feet between houses. The lots that back up to existing residences located off of Karen Lane, Watauga Drive and West Lake Drive shall have minimum 20-feet rear setbacks.
6. The following buffer standards shall be required:
  - a. A minimum 20-foot wide buffer shall be required for all proposed single-family detached homes, cottages and terrace homes where adjacent to existing single-family homes.





year of the effective date of this zoning ordinance for the future construction of a City of Gainesville fire station. All costs associated with deeding the property shall be at the full expense of the developer. Architectural design for the fire station must be approved by both the City of Gainesville and the developer, and shall be substantially similar with residential and commercial standards submitted with the application.

13. No more than 10% of the units within the proposed indoor storage facility may be leased to non-residents of the proposed development.

#### **Transportation / Traffic**

14. Prior to the issuance of a land disturbance permit, the developer shall provide a signal warrant analysis be performed per Georgia Department of Transportation (GDOT) standards for each of the following two intersections:

- a. Dawsonville Highway (SR 53) at Avonlea Way and the new access road; and
- b. Dawsonville Highway (SR 53) at Canterbury Road and the new access road. The design of the signal warrant analysis should account for the probability that GDOT will not approve a signal at this location and should evaluate the intersection for an R-CUT design at the median break. If a traffic signal is approved by GDOT, improvements for a traffic signal at the intersection will require approval of the Gainesville Public Works Director and GDOT Traffic Operations Office.

All costs associated with the signal warrant analysis study, and if warranted by such study, any costs associated with the installation of a traffic signal and intersection improvements shall be at the full expense of the developer.

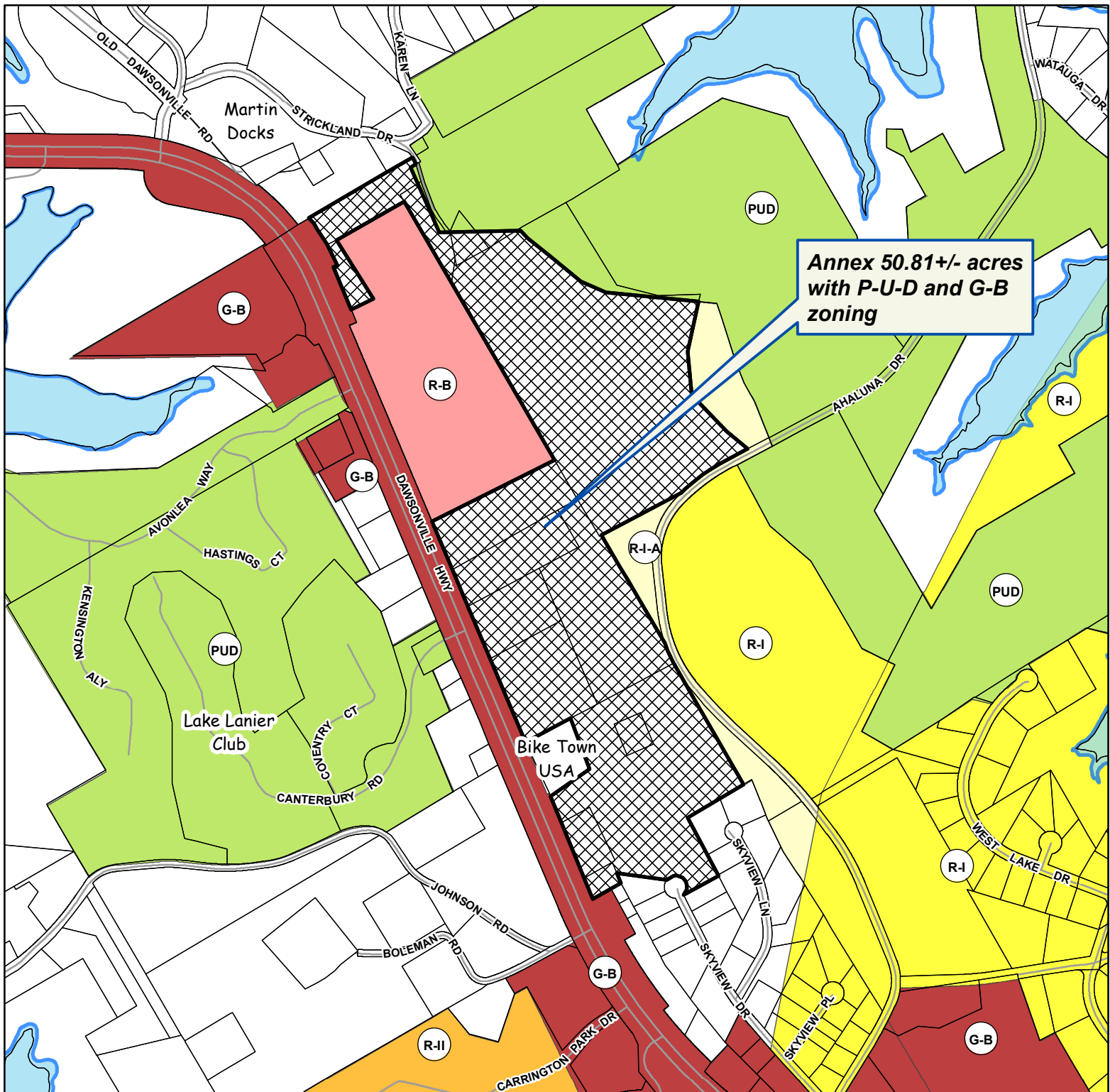
15. The developer shall perform the following traffic improvements identified within the Summary of Study Findings and Recommendations as stated within the revised Traffic Impact Study, dated April 7, 2017, for the proposed development:

- a. Dawsonville Highway (SR 53) at Avonlea Way and the new access road to include a northbound exclusive right turn lane to be added on Dawsonville Highway (SR 53) turning into new site driveway and the inclusion of one entering lane and one exiting lane for the new site access to be controlled by side street stop sign and accompanying stop bar; and
- b. Dawsonville Highway (SR 53) at Canterbury Road and the new access road to include a northbound exclusive right turn lane to be added on Dawsonville Highway (SR 53) turning into new site driveway and the inclusion of one entering lane and one exiting lane for the new site access to be controlled by side street stop sign and accompanying stop bar.

The developer shall coordinate these improvements with GDOT and the Gainesville Public Works Director prior to permitting. The Gainesville Public Works Director and GDOT shall have the final determination of the time line of these improvements based on the developer's proposed construction schedule. All costs associated with the improvements shall be at the full expense of the developer.

16. Prior to the issuance of a land disturbance permit for the Planned Unit Development (P-U-D), the developer shall evaluate, design and construct the left turn lanes on Dawsonville Highway (SR 53) to meet GDOT storage and design requirements at Avonlea Way and the new site driveway at Canterbury Road. Prior to the issuance of a land disturbance permit for the commercial development zoned General Business (G-B), the developer shall evaluate, design and construct the left turn lanes on Dawsonville Highway (SR 53) to meet GDOT storage and design requirements. If the existing left turn lane at this location meets these requirements, this condition will be deemed satisfied.
17. Developer consents to pay \$425,000.00 to be used solely for the purpose of making roadway improvements along Dawsonville Highway (SR 53) from McEver Road (SR 53) to Ahaluna Drive. In this regard, the developer shall deposit \$100,000.00 upon issuance of the initial land disturbance permit for the Planned Unit Development (P-U-D), and annually thereafter an additional \$100,000.00 until the full \$425,000.00 is paid in full (provided, the fourth and final payment will be for \$125,000.00). All such payments will be deposited into an escrow account at a financial institution chosen by the City of Gainesville. The City of Gainesville shall choose an escrow agent, who shall be authorized to disburse the funds to the City of Gainesville as said funds are needed to make roadway improvements along Dawsonville Highway (SR 53) from McEver Road (SR 53) to Ahaluna Drive. The amount as stated above is based on the cost estimate previously provided by the City of Gainesville to the developer for roadway improvements in addition to those improvements referenced elsewhere in the zoning conditions affecting the property that is the subject of the zoning application.
18. Prior to the issuance of a land disturbance permit, the intersection of Strickland Drive, Karen Lane and the new access road to the proposed development shall be redesigned to include realignment similar to what is shown on the revised concept plan for better traffic circulation, and to meet current roadway design criteria. The improvements shall be completed prior to permitting direct access from the development onto Karen Lane and Strickland Drive and prior to the construction of the most northern Pod of terrace and cottage homes. All costs associated with the improvements shall be at the full expense of the developer.
19. Prior to the issuance of a land disturbance permit, the developer shall seek verification from Hall County to determine whether or not any improvements will be required to the intersection of Sportsman Club Road and Strickland Drive.
20. All new streets shall meet the standards within the current Gainesville Unified Land Development Code. These same standards shall be required for the segment of Ahaluna Drive starting at the north side of the existing power line easement and adjacent to the entrance of the terrace homes, and shall extend in a northeasterly direction south of Watauga Drive where the city limits terminate. The remaining portions of Ahaluna Drive within the city limits shall meet the City of Gainesville Standards excluding the requirements of curb and gutter. All other residential uses, amenities, office and commercial areas shall provide for pedestrian connectivity throughout the development. All costs associated with the improvements shall be at the full expense of the developer.

21. Prior to the issuance of a land disturbance permit, the developer shall seek approval from the City of Gainesville and the Corps of Engineers to improve the existing Ahaluna Drive cul-de-sac to provide for better turn around for emergency and utility vehicles. If approved, curb and gutter and sidewalks shall be extended to the Ahaluna Drive cul-de-sac. All road and traffic improvements to Ahaluna Drive shall be at the expense of the developer and shall meet the standards within the current Gainesville Unified Land Development Code prior to acceptance. All cul-de-sacs constructed or modified as part of the development will be positioned (subject to Corps of Engineers, and City of Gainesville approval, as needed) on the west side of the road, in approximately the current location of the existing cul-de-sac but positioned in a way that would minimize the impact to the lots on the east side of the road. The final design shall require approval from the City of Gainesville.
22. There shall be no driveways from individual homes allowed onto Ahaluna Drive for lots that have road frontage on any new proposed interior street. There shall be no driveways from individual homes allowed onto Karen Lane or Strickland Drive.
23. There shall be no access allowed onto West Lake Drive and Skyview Drive.
24. The proposed commercial, retail and office outparcels shall provide inter parcel connectivity to one another.



Applicant:

## ANNEXATION REQUEST

OAK HALL COMPANIES, LLC



**Request:**  
Annex 50.81+/- acres with Planned Unit Development (P-U-D) and General Business (G-B) zoning for a mixed-use active adult community

**Subject Area Address:** 0 and 1758 Ahaluna Dr.; 1508, 1550, 1740, 1746, 1758, 1760, 1934 & 1982 Dawsonville Hwy; 300 and 301 Skyview Drive; 0, 2008 and 2016 Strickland Drive

Meeting: 5/9/2017

Prepared: 3/14/2017

Gainesville Community Development Department

 Subject Property



0 360 720 1,080 1,440 Feet

1" = 600'

**Tax Parcel:** 00-110-000-005 (part), 028, 032 (part) and 039; 00-110A-004-001 (part), 002A, 004 (part), 005 (part) 007 (part), 007A (part), 007X, 014 (part), 016 (part), 017 (part) and 018





Applicant:

## ANNEXATION REQUEST

OAK HALL COMPANIES, LLC



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Annex 50.81+/- acres with Planned Unit Development (P-U-D) and General Business (G-B) zoning for a mixed-use active adult community

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Meeting: 5/9/20107

Prepared: 3/14/2017

Gainesville Community Development Department



Subject Property

Aerial from 2015

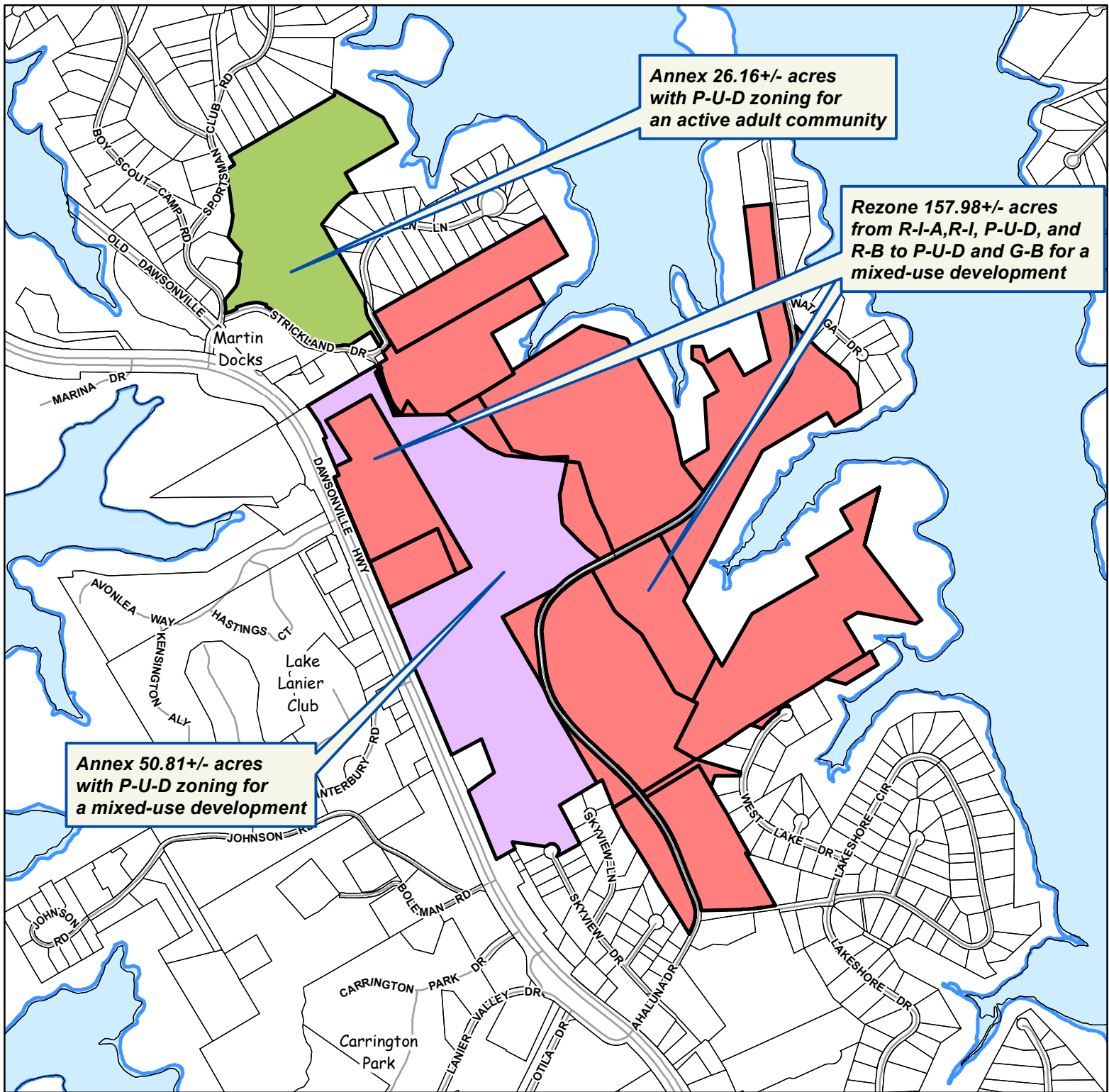
0 360 720 1,080 1,440 Feet



1" = 600'

**Tax Parcel:** 00-110-000-005 (part), 028, 032 (part) and 039; 00-110A-004-001 (part), 002A, 004 (part), 005 (part) 007 (part), 007A (part), 007X, 014 (part), 016 (part), 017 (part) and 018





Applicant:  
**ANNEXATION AND REZONING REQUEST**

**OAK HALL COMPANIES, LLC**



**Request:**  
Rezone 157.98+/- acres from R-I-A, R-I, P-U-D, and R-B to P-U-D and G-B and annex 76.97+/- acres with P-U-D zoning for a mixed-use development/active adult community

**Subject Area Address:**  
See attached list

Meeting: 5/9/2017  
Prepared: 2/16/2017

**Gainesville Community Development Department**

- Annex 26.16+/- Acres
- Annex 50.81+/- Acres
- Rezone 157.98+/- Acres

0 540 1,080 1,620 2,160 Feet



1" = 900'

**Tax Parcel:** See attached list

J. Ethan Underwood  
[eunderwood@mhtlegal.com](mailto:eunderwood@mhtlegal.com)

REVISED 2017-04-24

**NARRATIVE REPORT, LAND USES AND DEVELOPMENT SUMMARY, IMPROVEMENT REQUIREMENTS  
COMPARISON, AND COMMUNITY BENEFIT STATEMENT FOR ANNEXATION APPLICATION**

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Applicant:</b>           | <b>Oak Hall Companies, LLC</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Annexation Property:</b> | <b>50.81 Acres Designated as Hall County Tax Parcel(s): See Attached</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Current Zoning:</b>      | <b>AR-III, H-B, &amp; R-II</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Proposed Zoning:</b>     | <b>PUD &amp; G-B</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Proposed Use:</b>        | <b>Mixed-Use development, consisting of:</b> <ul style="list-style-type: none"><li>▪ <b>790 age-restricted, independent living, assisted living, and memory care residences</b></li><li>▪ <b>Approximately 24,000 sf of restaurant, retail, office</b></li><li>▪ <b>Approximately 40,000 sf of storage</b></li><li>▪ <b>Approximately 10,650 sf public/semi-public use (Fire Station)</b></li><li>▪ <b>7 commercial outparcels with approximately 8,000 sf average per parcel of Office/Retail/Restaurant</b></li></ul> |
| <b>ROW Access:</b>          | <b>Dawsonville Hwy (SR53), Ahaluna Drive, &amp; Strickland Drive</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

This statement is intended to comply with the application procedures established by The City of Gainesville, GA for submittal of applications for annexation as required by the City of Gainesville Unified Land Development Code (the "ULDC"), City of Gainesville Public Hearing Application Requirements, and other City of Gainesville Ordinances and Standards and is intended to serve as the Narrative Report required by the ULDC. As part of this Narrative Report, the Applicant asserts the statements contained in the Application for Annexation package, submitted herewith incorporated herein by reference, and as may be amended (the "Application"), describing justification for the requested zoning and for any request of variances, in any, as if such were fully stated herein.

The Applicant proposes to zone a total of 208.79 acres, consisting of 157.98 acres currently located within the City of Gainesville, together with the 50.81 acre-Annexation Property located in unincorporated Hall County. The Applicant requests to annex into the City of Gainesville the Annexation Property's 50.81 acres. The proposed annexation would not create an unincorporated island in violation of O.C.G.A. § 36-36-4. In the event the annexation is approved, there will be contiguity between any remaining unincorporated lands.

The Applicant has submitted a concurrent zoning application for the 157.98 acres located within the City of Gainesville, and incorporates all statements therein into this Application for Annexation, to satisfy the requirements of Chapter 9-22-3 of the ULDC.

Approval of the annexation and the concurrent zoning application would yield 185.02 acres zoned PUD, and an additional 23.77 acres zoned G-B, all located within the City.

## **I. Land Uses and Development Summary**

The Applicant proposes to develop the Proposed Use on the Annexation Property. The Annexation Property is adjoined by residential dwellings along Lake Lanier to the north, east, southeast, west and southwest (zoned R-B, AR-III, PUD, V-C, and R-I-A), and by commercially-zoned properties to the southwest, along SR53 (zoned H-B and G-B).

The Proposed Use is consistent with the intent of the Comprehensive Plan and the Future Development Map. The Annexation Property is depicted on the Gainesville 2030 Comprehensive Plan, as Mixed-Use General and Low Density Residential (1 to 4 Dwelling Units per Acre). To accomplish this, the Applicant proposes to utilize the PUD and G-B zoning categories.

### **A. Zoning and Land Use**

#### **i. 20.01 acres to be zoned G-B (General Business District)**

If the annexation is approved as submitted, 20.01 acres of the Annexation Property would be zoned G-B (General Business District), identified as Parcel 3 on the Special Annexation Exhibit for America's Home Place, dated September 29, 2016, last revised January 18, 2017 (the "**Annexation Survey**"), submitted concurrently with this Application and incorporated by reference. This 20.01 acres of the Annexation Property is sometimes hereafter referred to as the "G-B Annexation Property."

The G-B Annexation Property would be governed by the general provisions of the UDLC for that zoning category. In this regard, the Applicant proposes to subject the G-B Annexation Property to the land uses and performance standards depicted on the Zoning Plan, dated March 31, 2017, prepared for Oak Hall Companies, LLC by Site Development Consultants, Inc. (the "**Concept Plan**"), submitted concurrently with this Application and incorporated by reference.

#### **ii. 30.80 acres to be zoned PUD (Planned Unit Development)**

If the annexation is approved as submitted, 30.80 acres of the Annexation Property would be zoned PUD (Planned Unit Development), identified as Parcels 1 & 2 on the Annexation Survey. This 30.80 acres of the Annexation Property is sometimes hereafter referred to as the "PUD Annexation Property."

The Applicant proposes to subject the PUD Annexation Property to the land uses and performance standards depicted on the Concept Plan. In addition, the Applicant also proposes to subject the PUD



Annexation Property to the **PUD Performance Standards**, attached to and incorporated with this Narrative Report for Annexation.

#### **B. Traffic Impact Analysis**

The Applicant also submits with this Narrative Report, and incorporates herein, a Trip Generation Report and Traffic Study Network Determination.

Permanent access to the development will be from the ROW Access. All of the development's interior streets and driveways will be publicly-owned and maintained.

Traffic generated from the development will be minimal and the entrance will be at a location where sight distance is sufficient. All curb cuts shall be coordinated and approved by the City of Gainesville and GDOT and acceleration and deceleration lanes will be installed as required. All streets within the development will be constructed to conform to standard requirements. Parking will be provided onsite as required by the ULDC.

#### **C. School System**

As the Annexation Property will be age-restricted use, impact on schools will be minimal.

#### **D. Utilities**

With regard to public utilities, water, sanitary sewer, electricity and cable are available to the site. The development's water and sewer needs will be served by the City of Gainesville. The Applicant will install underground utility lines within the development to serve the project on an as-needed basis.

#### **E. Economic Impact**

The Applicant submits and incorporates herein the attached **Economic Impact Statement**. The calculations therein (a) analyze the impact of the entire 208.79 acre Mixed-Use development and (b) assume the owners of the residential units will have no children and be exempt from School Property Taxes. The number of residents with children will be nominal, and any such persons would likely be required to pay School Property Taxes.

#### **F. Environmental Impact**

The project should also have a minimal impact on the environment. There should be no impact on air quality. Drainage, soil erosion, and sedimentation controls will be extensively utilized on the site after obtaining all required approvals from the Soil Conservation Service and the City of Gainesville. Best management practices will be utilized to protect natural resources. The Applicant will submit plans detailing the development for approval by all applicable and appropriate governmental agencies, based on conformity with subdivision and zoning requirements, as well as other applicable ordinances, statutes and regulations.

**II. Improvement Requirements Comparison**

|                   | <u>City Standards</u>                                                                   | <u>Proposed Standards</u>                 |
|-------------------|-----------------------------------------------------------------------------------------|-------------------------------------------|
| ROW Widths        | 50 feet                                                                                 | 50 feet                                   |
| Pavement Widths   | 24 feet                                                                                 | 24 feet                                   |
| Sidewalk Width    | 4 feet                                                                                  | 4 feet                                    |
| Sidewalk Location | At least 1 side of each residential road, with connector sidewalks to commercial areas. | At least 1 side of each residential road. |

**III. Community Benefit Statement**

The community will benefit from the Proposed Use, which will provide high quality housing for seniors, improved fire service, and commercial and recreational benefits to the community. The Proposed Use will have little impact on school attendance, as most age-restricted units will not house school-aged children. Residents of age-restricted housing also tend to drive less and, when they do, they drive during off-peak hours, thereby lessening the impact on community traffic.

The Proposed Use will provide quality architectural designs, and extend utility services to areas currently unserved by water and sewer. The Proposed Use will also improve road access on Ahaluna Drive.

**CONCLUSION**

Approval of the Application will be in the best interest of the City. The Applicant respectfully requests that the Application, as requested by the Applicant, be approved. The Applicant also reserves the right to amend this statement and the Application by supplementing further responses and documents.

Sincerely,



Ethan Underwood,  
Attorney for the Applicant

# **PUD Performance Standards**

## **I. Residential Performance Standards**

### **RESIDENTIAL USE**

Maximum 790 Age-Restricted, Independent Living, Assisted Living, and Memory Care Dwellings on 185.02 acres zoned PUD with a gross density of approximately 4.43 residential units per acre.

### **AGE RESTRICTION**

No less than 80% of the residential units must be inhabited by at least one person 55 years of age or older.

### **BUILDING MATERIALS**

Exteriors of all homes and residential structures constructed on the subject property must be of brick, stone, hard coat stucco, or a cement-based material such as hardi-board. Accent materials such as, but not limited to, copper roofing, cedar shake, a cement-based material such as hardi-board, or a combination of such materials, may be used with such accent material not to exceed fifty percent (50%) of the facade. There shall be no vinyl or aluminum siding.

The roofing material used on all detached homes must be cedar shake, architectural/dimensional style asphalt shingles or metal as appropriate to the architectural style of each home.

### **PROPERTY OWNER ASSOCIATIONS**

The development shall have covenants that require maintenance of the landscaped entrance area, open space, and amenity areas by a homeowners association. Membership in the homeowners association is mandatory for owners of properties. Zero-Lot Residential Units and Stacked Flat Units may have separate sub-associations to manage their respective properties

### **AMENITIES**

An amenity area, including a swimming pool and club house, will be provided for use of residents and will be the responsibility of the homeowners association to maintain. On-street parking will be allowed for the amenity area.

An approximately 40,000 sf storage facility, with parking spaces initially for up to 19 , with a total of 50 at full build-out, Recreational Vehicles as well as up to 50 parking spaces for on-site boat storage will be available on the premises for lease *solely* to residents of the development.

Residents will also have the ability to utilize community docks and lease or purchase one of the approximately 130 boat slips for the development.

### **UNIT TYPE**

Residential units are designed to allow residents to “age in place.” Independent living products will include single-family detached homes, single-family attached homes, attached condominiums, and rental units. Rental units will also offer assisted living services, and memory care units.

## I. Detached Residential

| Type                             | Maximum # of Units |
|----------------------------------|--------------------|
| • POD A – Single Family Detached | 265 units          |
| • POD B – Single Family Detached | 40 units           |

### PERFORMANCE STANDARDS – DETACHED RESIDENTIAL

- Minimum lot width – 40 feet
- Minimum Heated Floor Area (1,500 sf)
- Maximum building height – 40 feet
- Each unit will have a minimum 2 car enclosed garage
- Each unit will have a minimum of 18 feet of driveway from the back of sidewalk to the building face or 20 feet from the back of the curb to the building when there is no sidewalk
- Setbacks, excluding steps, roof overhangs, chimneys, bay windows, and patios:
  - 15' front
  - 3' side
  - 10' building separation (foundation to foundation)
  - 10' interior rear



## II. Zero-Lot Line Residential

| Type                       | Maximum # of Units |
|----------------------------|--------------------|
| • Single Family Cottages   | 79 units           |
| • Terrace Homes – Detached | 81 units           |

The building footprint for each unit will comprise the boundaries of the individual lots; all other improved areas will be maintained by a mandatory homeowner association as “common area” and all undeveloped area will be maintained as “open space.”

### A. Single Family Cottages.

#### PERFORMANCE STANDARDS – ZERO-LOT LINE RESIDENTIAL

- Minimum unit width – 15 feet
- Minimum Heated Floor Area (500 sf)
- Maximum building height – 30 feet
- Each unit will have a minimum of 18 feet of driveway from the back of sidewalk to the building face or 20 feet from the back of the curb to the building when there is no sidewalk
- Setbacks, excluding steps, roof overhangs, chimneys, bay windows, and patios:
  - 0’ front
  - 0’ side
  - 0’ interior rear
  - 10’ building separation (foundation to foundation)





## B. Terrace Homes – Detached.

### PERFORMANCE STANDARDS – ZERO-LOT LINE RESIDENTIAL

- Minimum unit width – 24 feet
- Minimum Heated Floor Area (1,100 sf)
- Maximum building height – 30 feet
- Each unit will have a minimum 2 car enclosed garage
- Each unit will have a minimum of 18 feet of driveway from the back of sidewalk to the building face or 20 feet from the back of the curb to the building when there is no sidewalk
- Setbacks, excluding steps, roof overhangs, chimneys, bay windows, and patios:
  - 0' front
  - 0' side
  - 0' interior rear
  - 10' building separation (foundation to foundation)



### III. For-Rent Residential

For-Rent Residential units are multi-story apartment, with buildings operated by a professional management company. In all areas designated for For-Rent Residential use, all buildings and grounds will be maintained by a management company and all undeveloped areas will be maintained as “open space.”

| Type                                 | Maximum # of Units                                    |
|--------------------------------------|-------------------------------------------------------|
| • Independent Living – For Rent (IL) | 175 units, less MC units                              |
| • Assisted Living – For Rent (AL)    | 150 units, less MC units                              |
| • Memory Care – For Rent (MC)        | Up to 30 units, which count toward IL and AL maximums |

#### PERFORMANCE STANDARDS – FOR-RENT RESIDENTIAL

- Minimum Heated Floor Area – 700,000 sf
- Maximum building height – 75 feet
- Setbacks, excluding steps, roof overhangs, chimneys, bay windows, and patios:
  - 40’ front
  - 20’ side
  - 25’ interior rear
  - 50’ exterior rear
- Minimum Parking Requirements - 1 space per 1.5 residential unit, plus one space per employee



## **II. Commercial Performance Standards**

### **COMMERCIAL USE**

Commercial Uses within the Planned Unit Development are generally expected to be Retail/Office/Restaurant. In addition, an approximately 40,000 sf storage facility may be constructed within the PUD.

The following uses are not allowed within the commercial portion of the PUD:

- (a) Motels or hotels with rooms accessed from the exterior of the building.
- (b) Adult novelty stores.
- (c) Adult entertainment centers.
- (d) Pawn shops.
- (e) Gas Stations.
- (f) Tire Stores.
- (g) Massage Parlors; provided this will not prohibit the operation of any profession by practitioners licensed by the State of Georgia.
- (h) Vaping stores
- (i) Auto body shops.
- (j) Automobile sales establishments.
- (k) Marine sales or repair stores.
- (l) Non-automated car wash.

### **BUILDING MATERIALS**

Building exteriors not screened from view from a public right-of-way right of way or any property line shall have an architectural treatment of brick, brick/frame, stone, or stucco, or another architectural treatment approved by the Planning Director.

### **MECHANICAL EQUIPMENT**

Ground and building-mounted mechanical equipment, such as coolers, HVAC equipment, meters, utility banks, trash receptacles, and electrical or telephone utility cabinets must be placed within the interior side and rear yards; provided, such mechanical equipment may be located in the front or corner side yards if screened from any right-of-way or any property line with landscape materials.



## PERFORMANCE STANDARDS - COMMERCIAL

- Maximum Building Coverage – 70% of lot
- Maximum building height – 75 feet
- Minimum landscaped open space – 10% of lot
- Minimum front landscape strip paralleling right-of-way – 10 feet
- Minimum side and rear landscape strip – 6 feet
- Setbacks, excluding steps, roof overhangs, chimneys, bay windows, and patios:
  - 40' from right-of-way
  - 10' side
  - 25' interior rear
  - 50' adjacent to residential use
- Minimum Parking Requirements - See Gainesville Unified Land Development Code



**City Economic Impact Statement: Oak Hall Companies, LLC**

|                             |                    |  |                            |                        |  |                                     |                        |
|-----------------------------|--------------------|--|----------------------------|------------------------|--|-------------------------------------|------------------------|
| <b>Population</b>           | <b>36,306</b>      |  | <b>Millage Rate</b>        | <b>0.00298</b>         |  | <b>Total M&amp;O</b>                | <b>\$ 9,657,458.00</b> |
| <b>Households</b>           | <b>12,967</b>      |  |                            |                        |  | <b>Expenditures Per Child (40%)</b> | <b>\$ 3,401.41</b>     |
|                             |                    |  | <b>School Millage Rate</b> | <b>0.00685</b>         |  | <b>Police Expenditures</b>          | <b>\$ 8,471,549.00</b> |
| <b>Impact Fees per Unit</b> | <b>\$ 1,589.81</b> |  | <b>Sales Tax Revenue</b>   | <b>\$ 5,036,730.00</b> |  | <b>Fire Expenditures</b>            | <b>\$ 6,542,453.00</b> |

**Table 1: Projected Residential Population**

| <u>Year</u> | <u>New Houses</u>        | <u>Total Houses</u>            | <u>Population</u> |
|-------------|--------------------------|--------------------------------|-------------------|
| 1           | 77                       | 77                             | 216               |
| 2           | 77                       | 154                            | 431               |
| 3           | 77                       | 231                            | 647               |
| 4           | 78                       | 309                            | 865               |
| 5           | 78                       | 387                            | 1084              |
| 6           | 78                       | 465                            | 1302              |
|             |                          |                                |                   |
|             |                          |                                |                   |
| <u>Year</u> | <u>AL &amp; IL Units</u> | <u>Total AL &amp; IL Units</u> | <u>Population</u> |
| 1           |                          | 0                              | 0                 |
| 2           |                          | 0                              | 0                 |
| 3           | 109                      | 109                            | 114               |
| 4           | 217                      | 217                            | 228               |
| 5           | 325                      | 325                            | 341               |
| 6           | 0                        | 325                            | 341               |

**Table 2: Projected Annual General Property Tax Revenue from Residential**

| <u>Average Home Price</u> | <u>Year</u> | <u>Revenue</u> |
|---------------------------|-------------|----------------|
| \$400,000.00              | 1           | \$91,325.08    |
|                           | 2           | \$182,650.16   |
|                           | 3           | \$273,975.24   |
| <u>Tax per House</u>      |             |                |
| \$1,186                   | 4           | \$366,486.36   |
|                           | 5           | \$458,997.48   |

**Table 3: Projected Annual Sales Tax Revenue from Residential**

| <u>Year</u> | <u>Revenue</u> |
|-------------|----------------|
| 1           | \$29,908.86    |
| 2           | \$59,817.72    |
| 3           | \$89,726.59    |
| 4           | \$120,023.87   |
| 5           | \$150,321.16   |
| 6           | \$180,618.45   |

**Table 4: Projected Annual School Property Tax Revenue from Residential (Assume 40% Exempt from School Tax)**

| <u>Average Home Price</u>      | <u>Year</u> | <u>Revenue</u> |
|--------------------------------|-------------|----------------|
| \$400,000.00                   | 1           | \$126,588.00   |
|                                | 2           | \$253,176.00   |
|                                | 3           | \$379,764.00   |
| <u>Avg. Prop Tax per House</u> |             |                |
| \$2,740                        | 4           | \$507,996.00   |
|                                | 5           | \$636,228.00   |
|                                | 6           | \$764,460.00   |

**Table 5: Projected Residential Impact Fees: One Time Fee per Annum**

| <u>Year</u> | <u>Total</u>  |
|-------------|---------------|
| 1           | \$ 122,415.37 |
| 2           | \$ 122,415.37 |
| 3           | \$ 122,415.37 |
| 4           | \$ 124,005.18 |
| 5           | \$ 124,005.18 |
| 6           | \$ 124,005.18 |

| Table 6: Projected Annual Sales Tax Revenue from IL & AL |              |
|----------------------------------------------------------|--------------|
| Year                                                     | Revenue      |
| 1                                                        |              |
| 2                                                        |              |
| 3                                                        | \$42,338.52  |
| 4                                                        | \$126,627.13 |
| 5                                                        | \$252,865.83 |
| 6                                                        | \$252,865.83 |

| Table 7: Projected Property Tax Revenue from IL & AL |                  |              |
|------------------------------------------------------|------------------|--------------|
| Year                                                 | Assessment Value | Revenue      |
| 1                                                    | \$ 900,000.00    | \$8,847.00   |
| 2                                                    | \$ 2,500,000.00  | \$24,575.00  |
| 3                                                    | \$ 15,000,000.00 | \$147,450.00 |
| 4                                                    | \$ 15,000,000.00 | \$147,450.00 |
| 5                                                    | \$ 15,000,000.00 | \$147,450.00 |
| 6                                                    | \$ 15,000,000.00 | \$147,450.00 |

| Table 8: Projected IL & AL Impact Fees: One Time Fee per Annum |               |
|----------------------------------------------------------------|---------------|
| Year                                                           | Total         |
| 1                                                              | \$ -          |
| 2                                                              | \$ 173,289.29 |
| 3                                                              | \$ 344,988.77 |
| 4                                                              | \$ 516,688.25 |
| 5                                                              | \$ -          |
| 6                                                              | \$ -          |

| Table 9: Projected Property Tax Revenue from Commercial |      |              |
|---------------------------------------------------------|------|--------------|
| Average Value per SF                                    | Year | Revenue      |
| \$120.00                                                | 1    | \$23,592.00  |
|                                                         | 2    | \$46,004.40  |
| Total SF                                                | 3    | \$67,296.18  |
| 120,000.00                                              | 4    | \$87,523.37  |
|                                                         | 5    | \$106,739.20 |
| Depreciation                                            | 6    | \$124,994.24 |
| 5%                                                      |      |              |

| Table 10: Projected Commercial Impact Fees: One Time Fee per Annum |      |            |
|--------------------------------------------------------------------|------|------------|
| Average Fee per 1000 SF                                            | Year | Revenue    |
| \$94.46                                                            | 1    | \$1,889.20 |
|                                                                    | 2    | \$1,889.20 |
| Total SF                                                           | 3    | \$1,889.20 |
| 120,000.00                                                         | 4    | \$1,889.20 |
|                                                                    | 5    | \$1,889.20 |
|                                                                    | 6    | \$1,889.20 |

| Table 11: Cost of Law Enforcement Services |                  |                                     |
|--------------------------------------------|------------------|-------------------------------------|
| Year                                       | Total Households | Annual Law Enforcement Expenditures |
| 1                                          | 77               | \$50,305.33                         |
| 2                                          | 154              | \$100,610.67                        |
|                                            |                  |                                     |
| 3                                          | 340              | \$222,127.45                        |
| 4                                          | 526              | \$343,644.23                        |
| 5                                          | 712              | \$465,161.02                        |
| 6                                          | 790              | \$516,119.67                        |

| Table 12: Cost of Fire Protection Services |                  |                          |
|--------------------------------------------|------------------|--------------------------|
| Year                                       | Total Households | Annual Fire Expenditures |
| 1                                          | 77               | \$38,850.07              |
| 2                                          | 154              | \$77,700.14              |
|                                            |                  |                          |
| 3                                          | 340              | \$171,545.77             |
| 4                                          | 526              | \$265,391.40             |
| 5                                          | 712              | \$359,237.03             |
| 6                                          | 790              | \$398,591.65             |

| Table 13: M&O Expenditures |                  |                         |
|----------------------------|------------------|-------------------------|
| Year                       | Total Households | Annual M&O Expenditures |
| 1                          | 77               | \$57,347.44             |
| 2                          | 154              | \$114,694.88            |
|                            |                  |                         |
| 3                          | 340              | \$253,222.47            |
| 4                          | 526              | \$391,750.05            |
| 5                          | 712              | \$530,277.64            |
| 6                          | 790              | \$588,369.85            |

| Table 14: Summary of Annual Impact at Completion                |         |                       |
|-----------------------------------------------------------------|---------|-----------------------|
| Impact Summary                                                  | Column1 | Totals                |
| <b>Revenues</b>                                                 |         |                       |
| Property Taxes to                                               |         | \$1,495,901.72        |
| Sales Taxes to City                                             |         | \$433,484.28          |
| Total Revenue                                                   |         | \$1,929,386.00        |
|                                                                 |         |                       |
| <b>Expenditures</b>                                             |         |                       |
| Police                                                          |         | \$516,119.67          |
| Fire                                                            |         | \$398,591.65          |
| M&O                                                             |         | \$588,369.85          |
| School Expenditures<br>(1% of Homes have a<br>school-age child) |         | \$44,284.37           |
| Total Expenditures                                              |         | \$1,547,365.53        |
|                                                                 |         |                       |
| Annual Net Revenue                                              |         | \$382,020.47          |
|                                                                 |         |                       |
| <b>Total Impact Fees</b>                                        |         | <b>\$1,785,563.16</b> |

**SURVEYOR'S NOTES:**

1. THIS EXHIBIT WAS PREPARED ON THE GEORGIA STATE PLANE COORDINATE SYSTEM, TRANSVERSE MERCATOR PROJECTION, WEST ZONE, NORTH AMERICAN DATUM OF 1983/2007 ADJUSTMENT. THE COMBINED SCALE FACTOR FOR THIS SITE IS 0.99999987. (GRID DISTANCE/SCALE FACTOR=GROUND DISTANCE). ALL COORDINATES SHOWN HEREON ARE GRID COORDINATES UNLESS OTHERWISE STATED.

2. CONVENTIONAL EQUIPMENT USED FOR MEASUREMENT WAS A TOPCON PS 103. GPS EQUIPMENT USED FOR MEASUREMENT WAS A CHAMPION TWO GNSS RECEIVER USING REAL-TIME KINEMATIC OBSERVATIONS PROCESSED THROUGH THE ECPN NETWORK.

4. THIS EXHIBIT HAS BEEN CALCULATED FOR CLOSURE AND WAS FOUND TO BE ACCURATE, AS FOLLOWS:

PARCEL 1 - WITHIN ONE FOOT IN 258,097 FEET.  
PARCEL 2 - WITHIN ONE FOOT IN 235,097 FEET.  
PARCEL 3 - WITHIN ONE FOOT IN 950,224 FEET.

3. THIS EXHIBIT IS FOR THE EXCLUSIVE USE OF THE PARTIES LISTED UNDER THE CAPTION "EXHIBIT FOR" ANY THIRD PARTY USE TO BE AT RISK. Only One.

6. THE FIELD SURVEY WAS CONDUCTED FEBRUARY 9TH AND 10TH, 2013.

**REFERENCES:**

1. DEED BOOK 7359, PAGE 508
2. DEED BOOK 839, PAGE 81
3. DEED BOOK 3403, PAGE 158
4. DEED BOOK 3714, PAGE 478
5. DEED BOOK 4835, PAGE 172
6. DEED BOOK 5077, PAGE 288
7. DEED BOOK 6004, PAGE 665
8. DEED BOOK 5184, PAGE 608
9. DEED BOOK 5030, PAGE 289
10. DEED BOOK 5077, PAGE 286
11. PLAT BOOK 117, PAGE 37
12. PLAT BOOK 79, PAGE 34



|      |                          |        |             |
|------|--------------------------|--------|-------------|
| ALC  | ANGLE IRON FOUND         | P 19   | PLAC POLE   |
| AF   | AIR FOUND                | Q 10   | QUARTZ      |
| AG   | AGGREGATE MONUMENT FOUND | R 10   | RANGE SLOPE |
| ALF  | ALUM FOUND               | R 11   | RANGE SLOPE |
| C 1  | CHAMP TOP PIN FOUND      | SI 20  | SILTY SAND  |
| C 2  | CHAMP TOP PIN FOUND      | SI 21  | SILTY SAND  |
| C 3  | CHAMP TOP PIN FOUND      | SI 22  | SILTY SAND  |
| C 4  | CHAMP TOP PIN FOUND      | SI 23  | SILTY SAND  |
| C 5  | CHAMP TOP PIN FOUND      | SI 24  | SILTY SAND  |
| C 6  | CHAMP TOP PIN FOUND      | SI 25  | SILTY SAND  |
| C 7  | CHAMP TOP PIN FOUND      | SI 26  | SILTY SAND  |
| C 8  | CHAMP TOP PIN FOUND      | SI 27  | SILTY SAND  |
| C 9  | CHAMP TOP PIN FOUND      | SI 28  | SILTY SAND  |
| C 10 | CHAMP TOP PIN FOUND      | SI 29  | SILTY SAND  |
| C 11 | CHAMP TOP PIN FOUND      | SI 30  | SILTY SAND  |
| C 12 | CHAMP TOP PIN FOUND      | SI 31  | SILTY SAND  |
| C 13 | CHAMP TOP PIN FOUND      | SI 32  | SILTY SAND  |
| C 14 | CHAMP TOP PIN FOUND      | SI 33  | SILTY SAND  |
| C 15 | CHAMP TOP PIN FOUND      | SI 34  | SILTY SAND  |
| C 16 | CHAMP TOP PIN FOUND      | SI 35  | SILTY SAND  |
| C 17 | CHAMP TOP PIN FOUND      | SI 36  | SILTY SAND  |
| C 18 | CHAMP TOP PIN FOUND      | SI 37  | SILTY SAND  |
| C 19 | CHAMP TOP PIN FOUND      | SI 38  | SILTY SAND  |
| C 20 | CHAMP TOP PIN FOUND      | SI 39  | SILTY SAND  |
| C 21 | CHAMP TOP PIN FOUND      | SI 40  | SILTY SAND  |
| C 22 | CHAMP TOP PIN FOUND      | SI 41  | SILTY SAND  |
| C 23 | CHAMP TOP PIN FOUND      | SI 42  | SILTY SAND  |
| C 24 | CHAMP TOP PIN FOUND      | SI 43  | SILTY SAND  |
| C 25 | CHAMP TOP PIN FOUND      | SI 44  | SILTY SAND  |
| C 26 | CHAMP TOP PIN FOUND      | SI 45  | SILTY SAND  |
| C 27 | CHAMP TOP PIN FOUND      | SI 46  | SILTY SAND  |
| C 28 | CHAMP TOP PIN FOUND      | SI 47  | SILTY SAND  |
| C 29 | CHAMP TOP PIN FOUND      | SI 48  | SILTY SAND  |
| C 30 | CHAMP TOP PIN FOUND      | SI 49  | SILTY SAND  |
| C 31 | CHAMP TOP PIN FOUND      | SI 50  | SILTY SAND  |
| C 32 | CHAMP TOP PIN FOUND      | SI 51  | SILTY SAND  |
| C 33 | CHAMP TOP PIN FOUND      | SI 52  | SILTY SAND  |
| C 34 | CHAMP TOP PIN FOUND      | SI 53  | SILTY SAND  |
| C 35 | CHAMP TOP PIN FOUND      | SI 54  | SILTY SAND  |
| C 36 | CHAMP TOP PIN FOUND      | SI 55  | SILTY SAND  |
| C 37 | CHAMP TOP PIN FOUND      | SI 56  | SILTY SAND  |
| C 38 | CHAMP TOP PIN FOUND      | SI 57  | SILTY SAND  |
| C 39 | CHAMP TOP PIN FOUND      | SI 58  | SILTY SAND  |
| C 40 | CHAMP TOP PIN FOUND      | SI 59  | SILTY SAND  |
| C 41 | CHAMP TOP PIN FOUND      | SI 60  | SILTY SAND  |
| C 42 | CHAMP TOP PIN FOUND      | SI 61  | SILTY SAND  |
| C 43 | CHAMP TOP PIN FOUND      | SI 62  | SILTY SAND  |
| C 44 | CHAMP TOP PIN FOUND      | SI 63  | SILTY SAND  |
| C 45 | CHAMP TOP PIN FOUND      | SI 64  | SILTY SAND  |
| C 46 | CHAMP TOP PIN FOUND      | SI 65  | SILTY SAND  |
| C 47 | CHAMP TOP PIN FOUND      | SI 66  | SILTY SAND  |
| C 48 | CHAMP TOP PIN FOUND      | SI 67  | SILTY SAND  |
| C 49 | CHAMP TOP PIN FOUND      | SI 68  | SILTY SAND  |
| C 50 | CHAMP TOP PIN FOUND      | SI 69  | SILTY SAND  |
| C 51 | CHAMP TOP PIN FOUND      | SI 70  | SILTY SAND  |
| C 52 | CHAMP TOP PIN FOUND      | SI 71  | SILTY SAND  |
| C 53 | CHAMP TOP PIN FOUND      | SI 72  | SILTY SAND  |
| C 54 | CHAMP TOP PIN FOUND      | SI 73  | SILTY SAND  |
| C 55 | CHAMP TOP PIN FOUND      | SI 74  | SILTY SAND  |
| C 56 | CHAMP TOP PIN FOUND      | SI 75  | SILTY SAND  |
| C 57 | CHAMP TOP PIN FOUND      | SI 76  | SILTY SAND  |
| C 58 | CHAMP TOP PIN FOUND      | SI 77  | SILTY SAND  |
| C 59 | CHAMP TOP PIN FOUND      | SI 78  | SILTY SAND  |
| C 60 | CHAMP TOP PIN FOUND      | SI 79  | SILTY SAND  |
| C 61 | CHAMP TOP PIN FOUND      | SI 80  | SILTY SAND  |
| C 62 | CHAMP TOP PIN FOUND      | SI 81  | SILTY SAND  |
| C 63 | CHAMP TOP PIN FOUND      | SI 82  | SILTY SAND  |
| C 64 | CHAMP TOP PIN FOUND      | SI 83  | SILTY SAND  |
| C 65 | CHAMP TOP PIN FOUND      | SI 84  | SILTY SAND  |
| C 66 | CHAMP TOP PIN FOUND      | SI 85  | SILTY SAND  |
| C 67 | CHAMP TOP PIN FOUND      | SI 86  | SILTY SAND  |
| C 68 | CHAMP TOP PIN FOUND      | SI 87  | SILTY SAND  |
| C 69 | CHAMP TOP PIN FOUND      | SI 88  | SILTY SAND  |
| C 70 | CHAMP TOP PIN FOUND      | SI 89  | SILTY SAND  |
| C 71 | CHAMP TOP PIN FOUND      | SI 90  | SILTY SAND  |
| C 72 | CHAMP TOP PIN FOUND      | SI 91  | SILTY SAND  |
| C 73 | CHAMP TOP PIN FOUND      | SI 92  | SILTY SAND  |
| C 74 | CHAMP TOP PIN FOUND      | SI 93  | SILTY SAND  |
| C 75 | CHAMP TOP PIN FOUND      | SI 94  | SILTY SAND  |
| C 76 | CHAMP TOP PIN FOUND      | SI 95  | SILTY SAND  |
| C 77 | CHAMP TOP PIN FOUND      | SI 96  | SILTY SAND  |
| C 78 | CHAMP TOP PIN FOUND      | SI 97  | SILTY SAND  |
| C 79 | CHAMP TOP PIN FOUND      | SI 98  | SILTY SAND  |
| C 80 | CHAMP TOP PIN FOUND      | SI 99  | SILTY SAND  |
| C 81 | CHAMP TOP PIN FOUND      | SI 100 | SILTY SAND  |
| C 82 | CHAMP TOP PIN FOUND      | SI 101 | SILTY SAND  |
| C 83 | CHAMP TOP PIN FOUND      | SI 102 | SILTY SAND  |
| C 84 | CHAMP TOP PIN FOUND      | SI 103 | SILTY SAND  |
| C 85 | CHAMP TOP PIN FOUND      | SI 104 | SILTY SAND  |
| C 86 | CHAMP TOP PIN FOUND      | SI 105 | SILTY SAND  |
| C 87 | CHAMP TOP PIN FOUND      | SI 106 | SILTY SAND  |
| C 88 | CHAMP TOP PIN FOUND      | SI 107 | SILTY SAND  |
| C 89 | CHAMP TOP PIN FOUND      | SI 108 | SILTY SAND  |
| C 90 |                          |        |             |

THIS EXHIBIT WAS PREPARED IN CONFORMITY WITH THE TECHNICAL STANDARDS FOR PROPERTY SURVEYS IN GEORGIA AS SET FORTH IN CHAPTER 186-7 OF THE RULES OF THE GEORGIA BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS AS SET FORTH IN THE GEORGIA PLAT ACT O.C.G.A. 15-6-67.

REGISTERED PROFESSIONAL  
LAND SURVEYORS

O. BOX 256  
AINESVILLE, GA. 30503  
PHONE: (770) 532-6492  
FAX: (770) 532-1995  
[www.pattonsurveying.com](http://www.pattonsurveying.com)



**PATTON**  
LAND SURVEYING, LLC



SPECIAL ANNEXATION EXHIBIT FOR:  
**AMERICA'S HOME PLACE**

-LOCATED IN =

AND LOTS 162, 172 AND 173  
9TH LAND DISTRICT  
CITY OF GAINESVILLE  
HALL COUNTY, GEORGIA

## REVISIONS

[illegible]

**SHEET NUMBER:**

1. 1

SCALE: NOT TO SCALE

SURVEY DATE: 02/12/15

15. **DATE:** 09/20/16

JN. 12-037







OAK HALL  
—COMPANIES LLC—

## Zoning Plan

PROJECT LYING IN LAND LOTS 161, 162, 163 & 173 OF THE  
9TH DISTRICT, CITY OF GAINESVILLE, HALL COUNTY, GEORGIA

Prepared for  
Oak Hall Companies, LLC  
5256 Peachtree Road, Suite 195  
770-662-5995  
Atlanta, GA 30341  
DATE: 4/17/2017

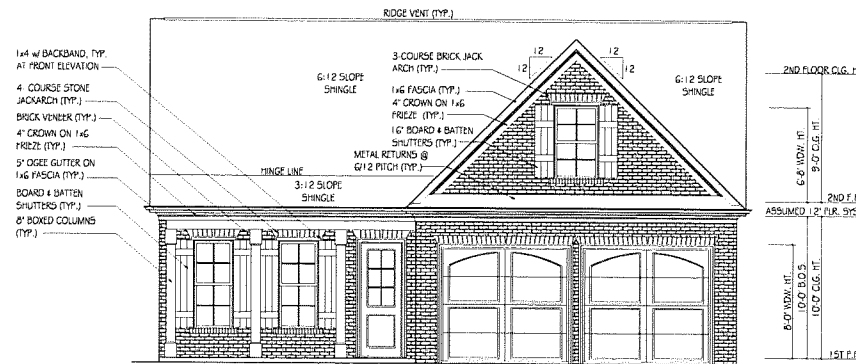


U.S. GOVERNMENT  
BUDFORD RESERVOIR  
LAKE SIONCY LANIER  
(SEGMENT 7)



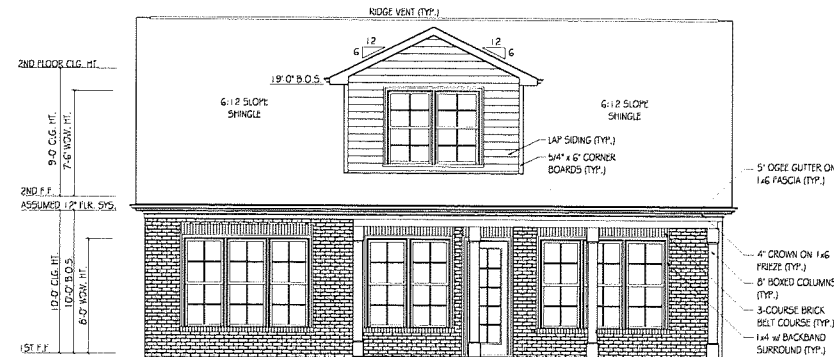






**FRONT ELEVATION**

1/4" = 1'-0"  
B.O.S. = BOTTOM OF SOFFIT

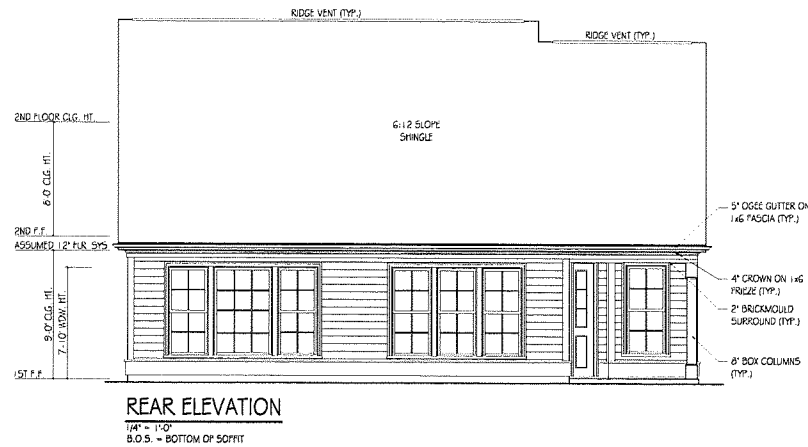
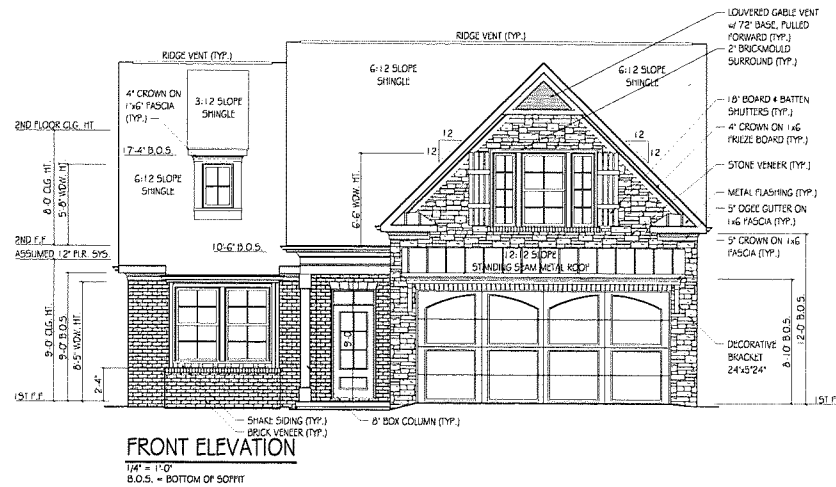


**REAR ELEVATION**

1/4" = 1'-0"  
B.O.S. = BOTTOM OF SOFFIT

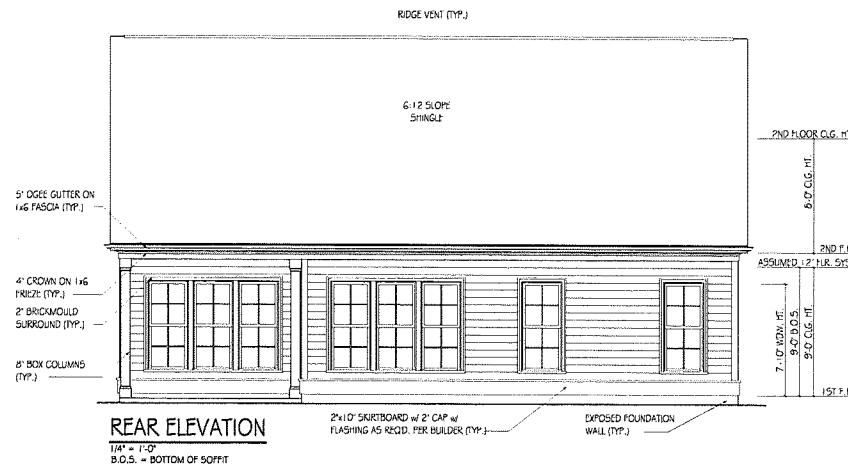
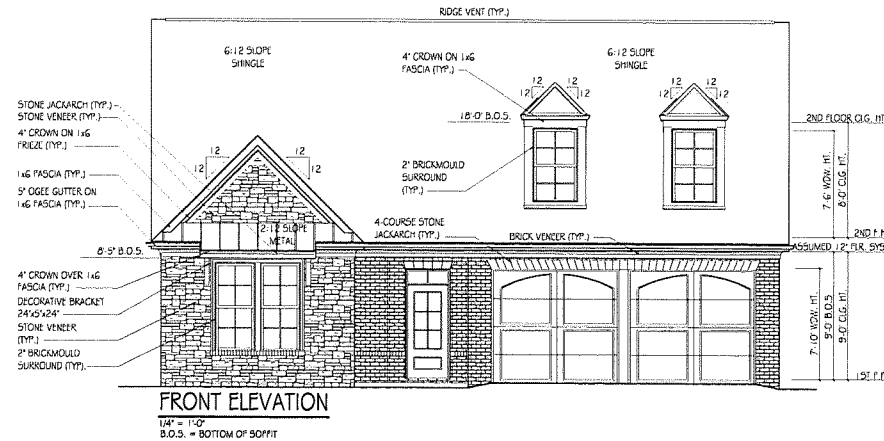
**GENERAL NOTE:**  
ALL DIMENSIONS SHOWN MAY VARY FOR ACTUAL SITE CONDITIONS IN THE FIELD. THE NUMBER OF EXTERIOR TREADS AND RISERS AT GARAGE, TERRACES, PORCHES, DECKS, ETC., ARE TO BE DETERMINED BY THE BUILDER / CONTRACTOR ACCORDING TO ACTUAL GRADES.

| TUBE                                                                                                                                                                                                                                                                                                                                                                                                                                                             | JOB #                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| 1203                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 15143                       |
| DATE                                                                                                                                                                                                                                                                                                                                                                                                                                                             | REVISED                     |
| 08/19/16                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                             |
| SQUARE FOOTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                             |
| 2303 SF                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                             |
| LOT #                                                                                                                                                                                                                                                                                                                                                                                                                                                            | SUBDIVISION                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | THE OVERLOOK AT OLD ATLANTA |
| PROJECT                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                             |
| CUSTOM HOME FOR JIM CHAPMAN COMMUNITIES                                                                                                                                                                                                                                                                                                                                                                                                                          |                             |
| THE NEWBURY -A                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                             |
| CLASSICAL CONCEPTS ATLANTA                                                                                                                                                                                                                                                                                                                                                                                                                                       |                             |
| P.O. BOX 732<br>FLOWERY BRANCH, GA. 30542                                                                                                                                                                                                                                                                                                                                                                                                                        |                             |
| 404-226-6964<br>(DAVID)                                                                                                                                                                                                                                                                                                                                                                                                                                          | 404-401-7298<br>(MARY)      |
| CCADORAN@YAHOO.COM<br>MFITZDORAN@AOL.COM                                                                                                                                                                                                                                                                                                                                                                                                                         |                             |
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| <p><b>Please Note:</b><br/>           CLASSICAL CONCEPTS is not a contractor and does not construct. It is a design firm. It is the responsibility of the contractor to obtain all necessary permits, licenses, and approvals. The contractor is responsible for all construction details and materials. The contractor is responsible for all construction details and materials. The contractor is responsible for all construction details and materials.</p> |                             |
| DRAWN                                                                                                                                                                                                                                                                                                                                                                                                                                                            | SHEET #                     |
| BCLLC                                                                                                                                                                                                                                                                                                                                                                                                                                                            | D1 of 6                     |



**GENERAL NOTE:**  
ALL GRADES SHOWN MAY VARY PER ACTUAL SITE CONDITIONS IN THE FIELD. THE NUMBER OF EXTERIOR TILES AND RISERS AT GARAGE, TERRACES, PORCHES, DECKS, ETC., ARE TO BE DETERMINED BY THE SUBSEQUENT CONTRACTOR ACCORDING TO ACTUAL DRAWS.

| TUBE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | JOB #                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| 1283                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 16178                  |
| DATE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | REVISED                |
| 09/10/16                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                        |
| SQUARE FOOTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        |
| 2229 SF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                        |
| LOT #                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | SUBDIVISION            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | NESTLE DOWN FARMS      |
| PROJECT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                        |
| CUSTOM HOME FOR JIM CHAPMAN COMMUNITIES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                        |
| THE DALTON -A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                        |
| CLASSICAL CONCEPTS ATLANTA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        |
| P.O. BOX 732<br>FLOWERY BRANCH, GA. 30542                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        |
| 404-225-5964<br>(DAVID)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 404-401-7298<br>(MARY) |
| CCADORAN@YAHOO.COM<br>MFTZDORAN@AOL.COM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                        |
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| <p><b>Please Note:</b><br/>CLASSICAL CONCEPTS is not responsible for any errors or omissions in this plan. It is the responsibility of the professional of record to provide for all necessary permits and approvals.</p> <p>1. Builder or contractor must verify ALL CONDITIONS prior to construction with owner.<br/>2. Conditions must include compliance with all local, state, and federal codes and regulations.<br/>3. Drawings are for informational purposes only. They are not to be used for construction purposes.<br/>4. Conditions must be met for all construction to be completed. If a condition is not met, the owner must provide for the condition to be met.</p> |                        |
| DRAWN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | SHEET #                |
| BCLLC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | D1 of 5                |



**GENERAL NOTE:**  
 ALL GRADES SHOWN MAY VARY FOR ACTUAL SITE CONDITIONS IN THE FIELD. THE NUMBER OF WINDOWS, DOORS AND SIZES AT GARAGE, TERRACES, PORCHES, DECKS, ETC., ARE TO BE DETERMINED BY THE SUBMITTER/CONTRACTOR ACCORDING TO ACTUAL GRADES.

| TUBE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | JOB #                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| 1284                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 16179                  |
| DATE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | REVISED                |
| 09/10/16                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                        |
| SQUARE FOOTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        |
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| CUSTOM HOME FOR JIM CHAPMAN COMMUNITIES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                        |
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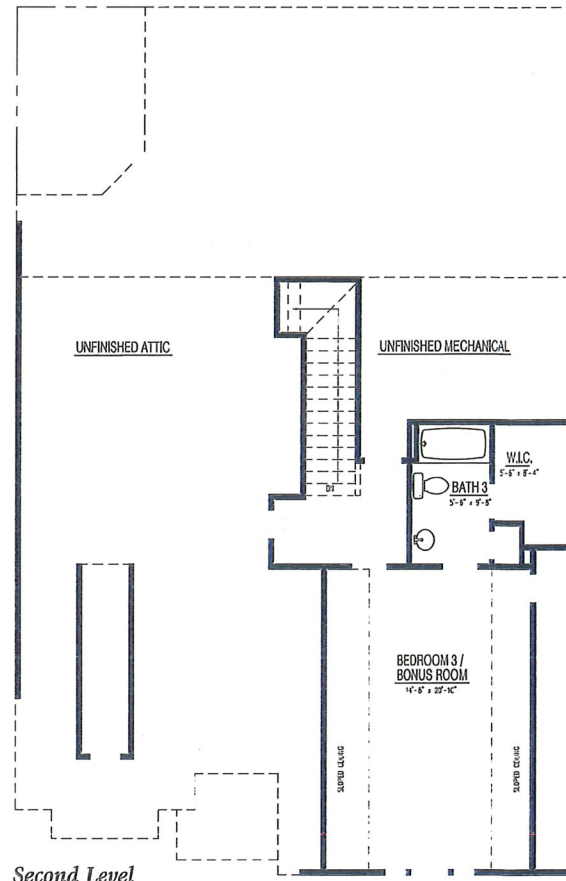
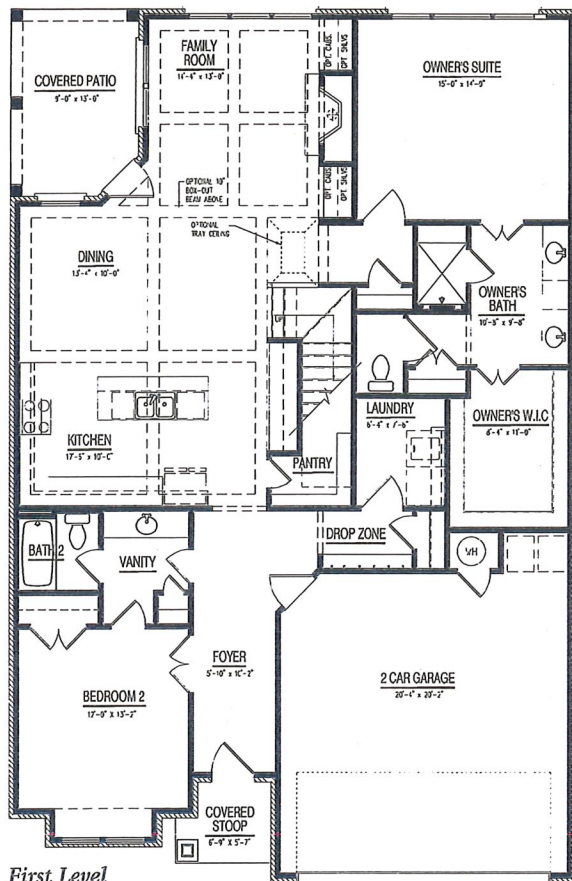


# THE OVERLOOK

## AT OLD ATLANTA

### Attached Villas

*Dalton Plan*  
2,270 Square Feet



**JIM  
CHAPMAN**  
COMMUNITIES

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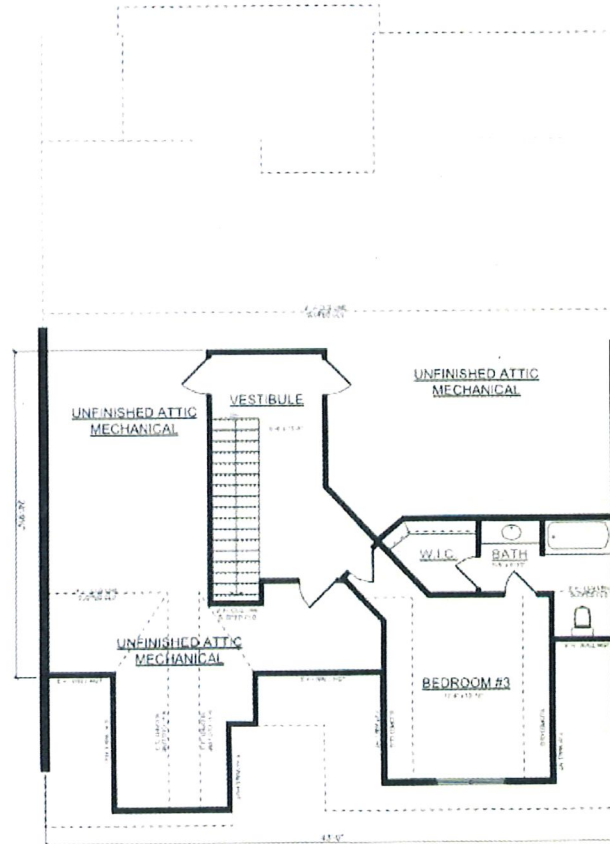
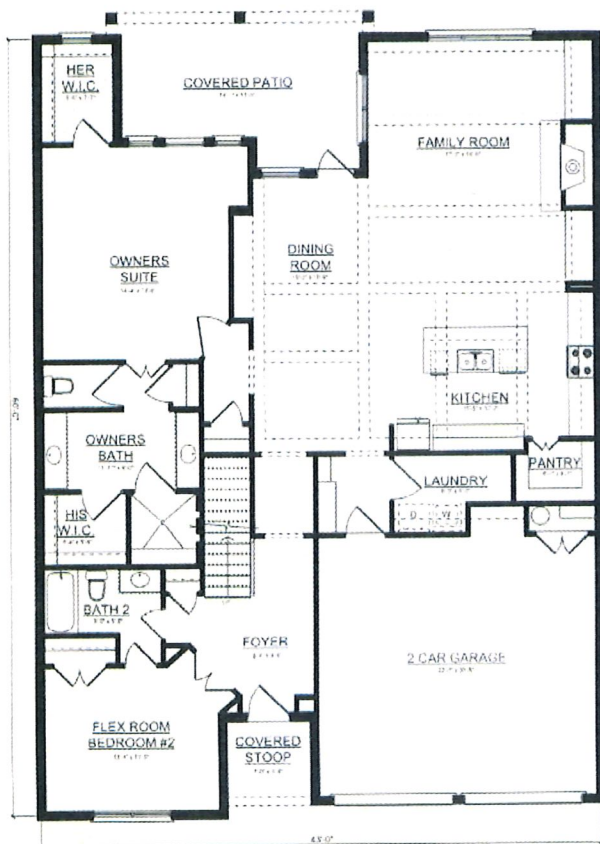
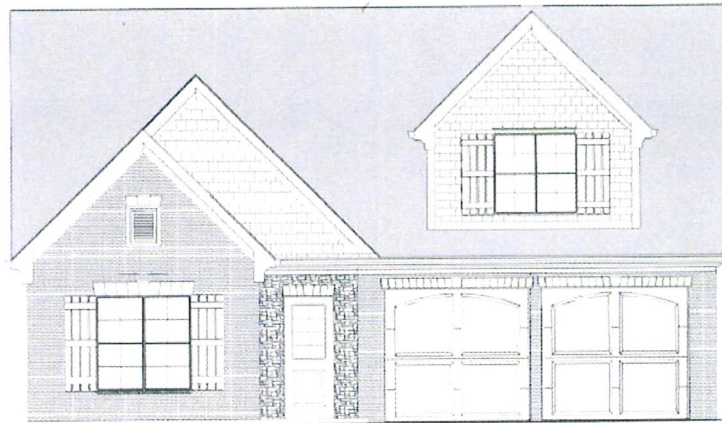




# THE OVERLOOK AT OLD ATLANTA

## Attached Villas

**Avery Plan**  
2,305 Square Feet



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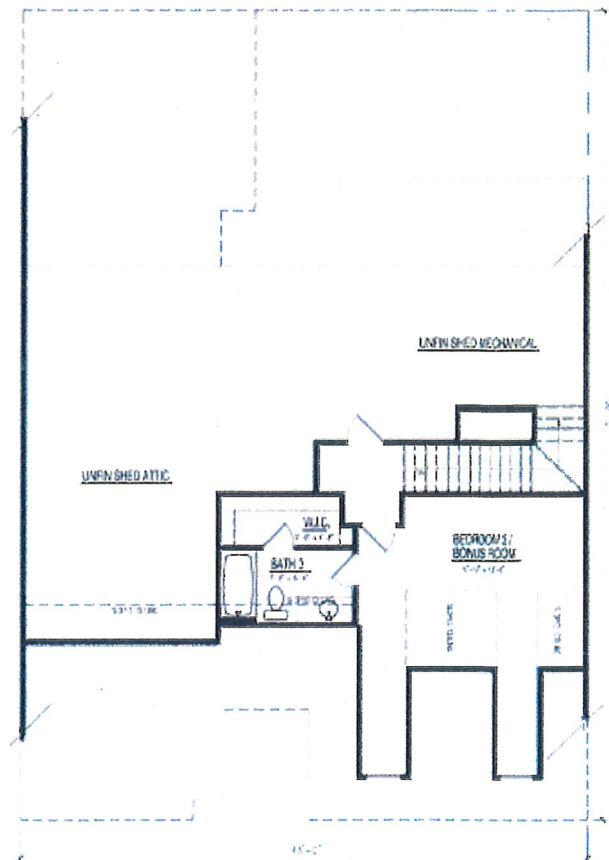
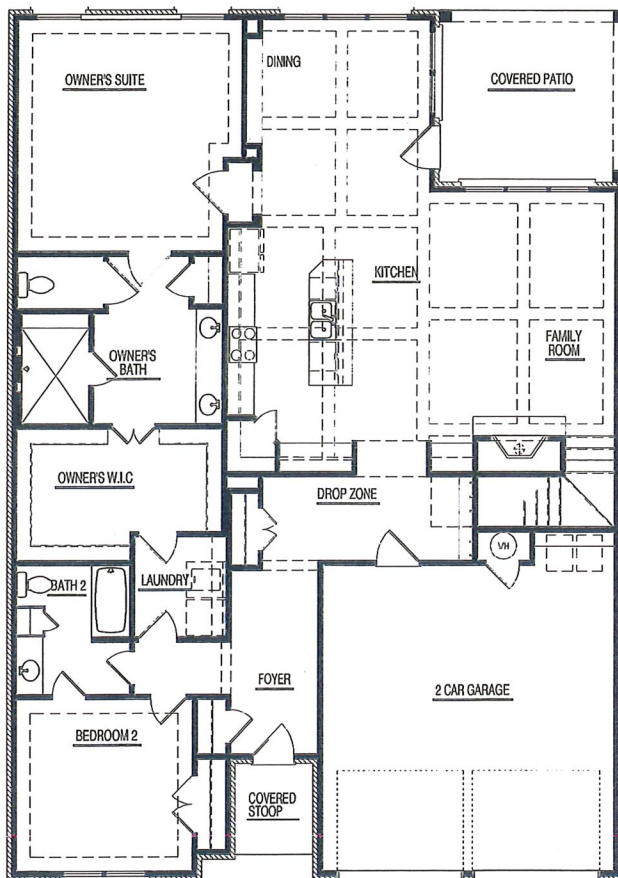
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# THE OVERLOOK

## AT OLD ATLANTA

### Attached Villas

*Hanover A Plan*  
2,339 Square Feet



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## **Traffic Impact Study**

Proposed Lanier Tract Multi-Use Development  
City of Gainesville, Georgia

revised April 7, 2017  
for 3/31/2017 site plan

**MARC R. ACAMPORA, PE, LLC**  
**TRAFFIC ENGINEERING**



**Traffic Impact Study**  
**Proposed Lanier Tract Multi-Use Development**  
**City of Gainesville, Georgia**

study prepared for:

Oak Hall Companies, LLC  
5256 Peachtree Road, Suite 195  
Atlanta, Georgia 30341

revised April 7, 2017  
for 3/31/2017 site plan



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## Summary

The Lanier Tract DRI is a primarily senior-age-restricted residential community that will be developed along Ahaluna Drive and Strickland Drive. There will be an office/retail node along GA 53, north of Avonlea Way. A fire station of 10,650 square feet is also proposed to be constructed along GA 53. Vehicular access will be provided at several locations, primarily along Ahaluna Drive, with connections to GA 53 via Strickland Drive, at the median opening at Avonlea Way, and through adjacent outparcels, aligning with Canterbury Road. The office/retail node will have a two right-in / right-out accesses directly on GA 53, with no anticipated internal connection to the balance of the development.

The project will generate 171 new trips in the a.m. peak hour, 251 new trips in the p.m. peak hour, and 3,097 new trips during a 24-hour weekday.

The following recommendations are made at each study intersection:

1. **Sportsman Club Road at Strickland Drive** – No changes are recommended at this intersection for the Existing, No-Build, or Future Phase One and Future Phase Two conditions.
2. **Dawsonville Highway at Sportsman Club Road** – The side street delays at this intersection are significant but the low side street volumes make the intersection a weak candidate for signalization. A northbound exclusive right turn lane should be added on GA 53 at Sportsman Club Road.
3. **Dawsonville Highway at Avonlea Way** – Side street delays are high at the existing eastbound approach of Avonlea Way. The volumes exiting the new Lanier Tract access will be low and many of them will be right turners. Therefore, this intersection is a weak candidate for signalization. A northbound right turn lane on GA 53 should be considered at this access and the site plan includes this lane. The new site access should be constructed with one entering lane and one exiting lane. The side street approach exiting the site should be controlled by side street stop sign and accompanying stop bar.
4. **Dawsonville Highway at Canterbury Road** – Side street delays are high on the existing eastbound approach of Canterbury Road. This intersection is a weak candidates for signalization in the existing, no-build, and Future Phase One conditions. No decel lane will be required for Future Phase One. With the future development of the retail outparcels, by others, a northbound deceleration lane on GA 53 is recommended. This intersection will be a prime candidate for signalization upon development of the outparcels. A signal warrant study should be performed for this intersection according to the standards set forth in the Federal Highway Administration's *Manual On Uniform Traffic Control Devices* (MUTCD). This new access at the Canterbury Road median break should be constructed with at least one entering lane and an exiting shared left/through lane and an exclusive right turn lane. The two westbound lanes are in anticipation of the development of the outparcels. With only the Lanier Tract volumes, only one entering and one exiting lane would be required. Until signalization is warranted, the side street approach exiting the outparcel tracts should be controlled by side street stop sign and accompanying stop bar.

5. **Dawsonville Highway at Ahaluna Drive** – A northbound right turn lane should be added on GA 53 at Ahaluna Drive in the existing condition. The future volumes exiting Ahaluna Drive would benefit from the addition of a second westbound lane, resulting in a shared left/through lane and an exclusive right turn lane on Ahaluna Drive at GA 53. There may be an opportunity to shorten the cycle length, which would reduce time spent by vehicles waiting on the side street.
6. **Dawsonville Highway at North Lake Square Access** – This intersection operates acceptably in all analysis conditions. No mitigation is recommended for any analysis condition.
7. **Dawsonville Highway at Beachwood Boulevard** – No changes are recommended at this intersection based on this study.
8. **Dawsonville Highway at McEver Road** – The existing southbound right turn volume is sufficiently-high (828 a.m., 481 p.m.) to merit consideration of the addition of a second exclusive right turn lane and/or the addition of a protected right turn overlap phase. There may be an opportunity to reduce the cycle length and fine-tune the signal timing at this intersection.
9. **Dawsonville Highway at Green Hill Circle** – This signalized intersection incurs high sides street delays, again, due to the allocation of the majority of greentime to the Dawsonville Highway approaches. There may be an opportunity to reduce the cycle length and fine-tune the signal timing at this intersection.
10. **Dawsonville Highway at Shallowford Road** – The lane configuration and signal phasing are appropriate for this intersection. Reduction of the cycle length and optimization of the allocation of greentime could reduce delays and queuing at this intersection.

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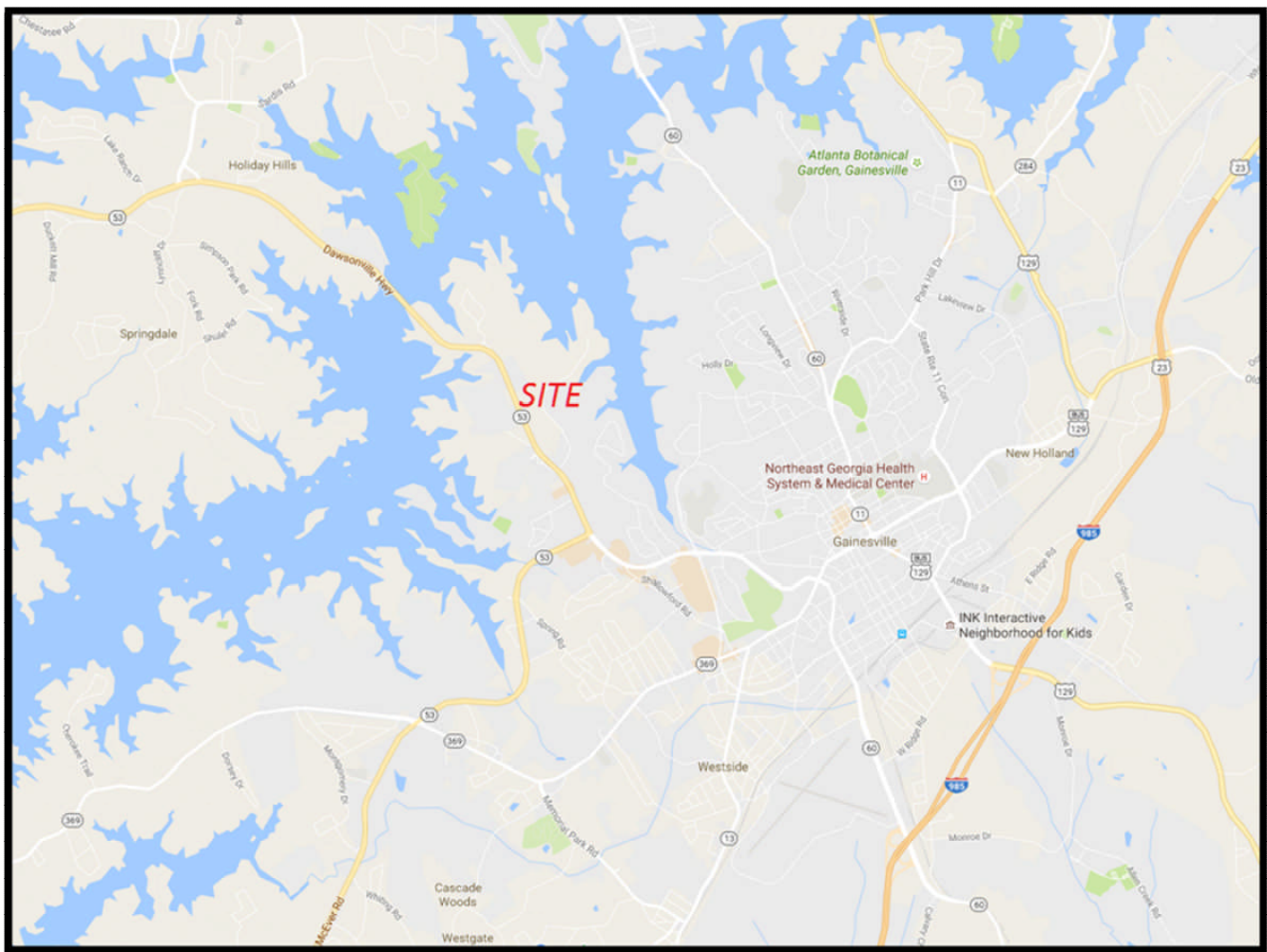
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## Introduction

This study assesses the traffic impact of a proposed multi-use Development of Regional Impact (DRI) in the City of Gainesville, Georgia. The site is located along the east side of Dawsonville Highway (Georgia State Route 53), and the east and west sides of Ahaluna Drive, as shown in the location map in Figure 1. The project will include a mix of senior living facilities, including senior-age-restricted single family homes, cottages, terrace homes, independent living apartments, and assisted living. In addition, the project will include a retail and office tract. This impact study includes the adjacent Willow Springs townhome development, to the north, and seven retail outparcels to be developed by others, located along the east side of GA 53.

The purpose of this traffic impact study is to determine existing traffic operating conditions in the vicinity of the proposed development, project future “no-build” and “build” traffic volumes, assess the impact of the subject development, then develop conclusions and recommendations to mitigate the project traffic impact and ensure safe and efficient existing and future traffic conditions in the vicinity of the project.



**Figure 1 – Lanier Tract Location Map**



## Existing Traffic Conditions

Existing traffic operating conditions in the vicinity of the proposed Lanier Tract development were assessed. The following is a description of existing facilities, volumes, and intersection operations.

### Description of Roadway Facilities

Georgia State Route 53 (Dawsonville Highway adjacent to the site) is a northwest to southeast principal arterial that extends from northwest Georgia, crosses US 19 and Lake Lanier, then passes the subject site and continues to the southeast. The State Route 53 designation turns to the southwest and continues along McEver Road to Mundy Mill Road, then follows Mundy Mill Road through its interchange with Interstate 985, and continues to the southeast. Adjacent to the subject development, GA 53 has two through travel lanes in each direction, is divided with a grassed median, and has exclusive turn lanes at major intersections. The terrain along this section of GA 53 is gently rolling and the posted speed limit is 45 mph.

Ahaluna Drive is a two lane rural local roadway that begins at a signalized intersection at GA 53 and winds through undeveloped land and low density residential development, to its terminus near the shore of Lake Lanier. The road is gently winding with rolling terrain. The proposed Lanier Tract development will develop some of the land on both sides of Ahaluna Drive, and the signal at GA 53 will provide one of the primary access points for this development to the roadway system.

Strickland Drive and Sportsman Club Road are two-lane residential streets that will provide access for the northern part of the proposed Lanier Tract DRI to GA 53. Strickland Drive is side street stop sign controlled at Sportsman Club Road and Sportsman Club Road is side street stop sign controlled at a median break on GA 53. Both roads are gently winding with gently rolling terrain and Strickland Drive becomes unpaved at its eastern terminus. The intersection of Sportsman Club Road at Strickland Drive is located in very close proximity to the intersection of Sportsman Club Road and Old Dawsonville Highway. However, lines of sight between the two intersections are clear and the volumes at these two locations are very low.

The following are photographs of intersections and roadways in the study area.



**Photograph 1 – Sportsman Club Road Facing Strickland Drive From Old Dawsonville Highway**



**Photograph 2 – View From Sportsman Club Road Facing North Along GA 53**





**Photograph 3 – View From Avonlea Way Facing North Along GA 53**



**Photograph 4 – GA 53 Facing North at Ahaluna Drive**



**Photograph 5 – Ahaluna Drive Facing West with Retail Access to Left, SR 53 Ahead**



**Photograph 6 – Typical Section Along Ahaluna Drive**





**Photograph 7 – View From Beechwood Drive Facing Under-Construction Retail Across GA 53**



**Photograph 8 – Eastbound McEver Road at Dawsonville Highway**



**Photograph 9 – Northbound Dawsonville Highway at Shallowford Road**

### Existing Traffic Volumes

The City of Gainesville’s Unified Land Development Code (ULDC) specifies that the study area to be included in a traffic impact study will be determined by calculating the peak hour and daily trips that the project will generate, then applying the table provided in the code, shown as Table 1, below, to determine the distance from the project that must be included in the study area.

**Table 1 – ULDC Study Area Size Requirements**

| Peak Hour Trips Generated | Daily Trips Generated | Distance from Perimeter of Proposed Development Along Roads |
|---------------------------|-----------------------|-------------------------------------------------------------|
| 100 - 150                 | 1,000 – 1,500         | ½ mile                                                      |
| 151 - 500                 | 1,501 – 5,000         | 1 mile                                                      |
| 501 – 1,000               | 5,001 – 10,000        | 2 miles                                                     |
| 1001 or more              | 10,001 or more        | 3 miles                                                     |

from the City of Gainesville ULDC

The trip generation for the proposed development is presented later in this report, summarized in Table 6. The peak hour trip generation for the project was calculated at 251 trips and the 24-hour volume is 3,097 trips. Based on these numbers, applied to the ULDC standard presented above, the study network was determined to

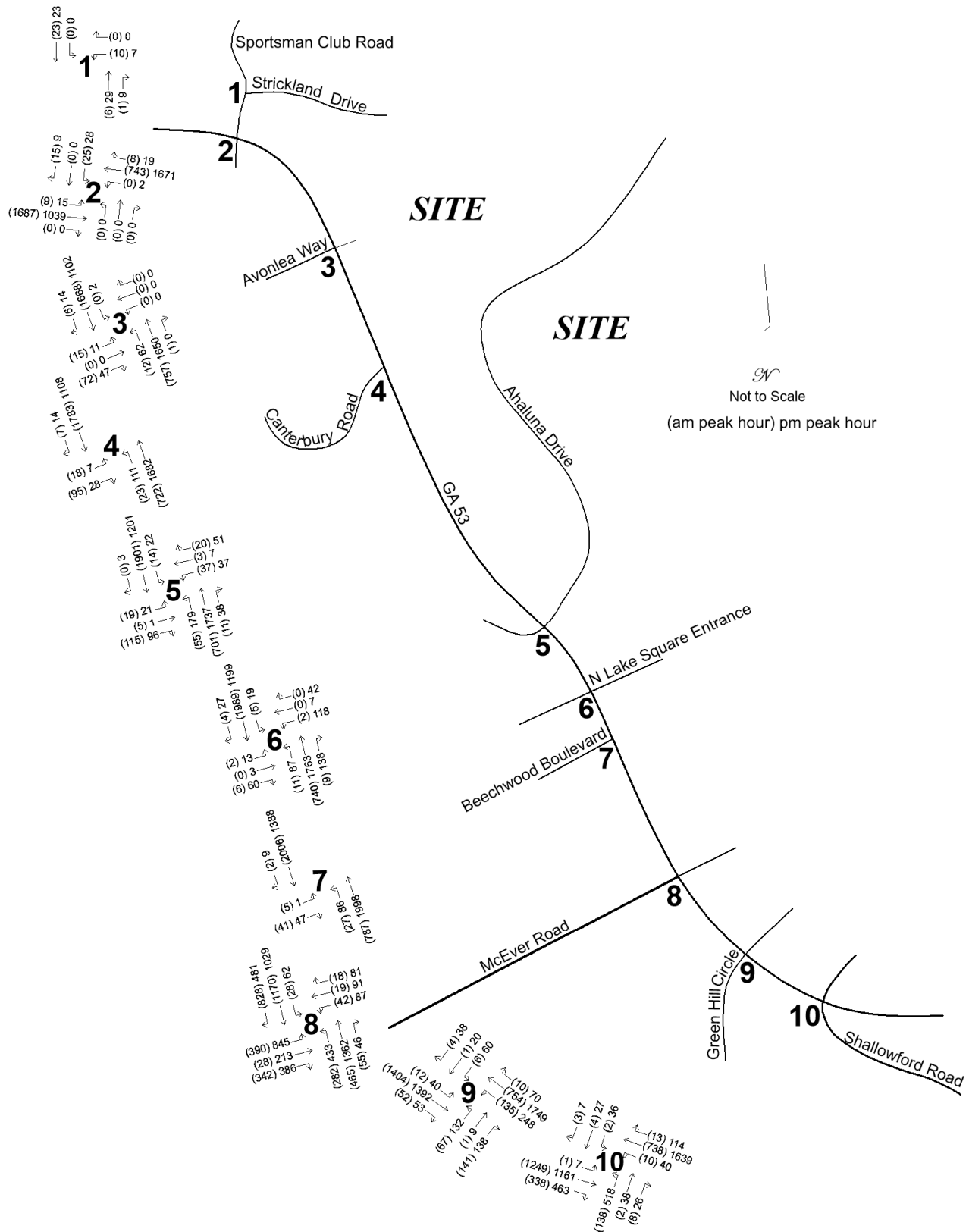
extend for one mile from the limits of the proposed site. The one mile limits were presented to the City and, based on that information, the intersections to be included in this study were agreed upon with the City as follows:

1. Sportsman Club Road at Strickland Drive
2. Dawsonville Highway at Sportsman Club Road
3. Dawsonville Highway at Avonlea Way
4. Dawsonville Highway at Canterbury Road
5. Dawsonville Highway at Ahaluna Drive
6. Dawsonville Highway at North Lake Square Shopping Center Entrance
7. Dawsonville Highway at Beachwood Boulevard
8. Dawsonville Highway at McEver Road
9. Dawsonville Highway at Green Hill Circle
10. Dawsonville Highway at Shallowford Road

Existing full turning movement traffic volume counts were collected at each of these intersections. The counts at most intersections were collected on Thursday, November 17, 2016, from 7:00 a.m. to 9:00 a.m. and from 4:30 p.m. to 6:30 p.m. The counts at the North Lake Square entrance were collected on Wednesday, March 22, 2017. Area schools were in standard session on the dates of the traffic counts. From the count data, the highest four consecutive 15-minute interval volumes at each intersection, during each time period, were determined. These volumes make up the typical weekday a.m. and p.m. peak hour traffic volumes at that intersection. The existing a.m. and p.m. peak hour turning movement volumes are shown in Figure 2. The intersection raw count data is found in Appendix A. It is noted that these existing volumes were compared with the volumes in the Preliminary Timing Report, SR 53 Connector – SR 60, Hall County, Georgia, dated April 2016, as provided by the City of Gainesville's traffic consultant. The magnitude of the side street volumes were found to be very comparable with the counts performed for this current study, and generally slightly higher. However, the volumes on the major streets were consistently notably higher for this current study.

Historic Georgia DOT 24-hour traffic counts were also collected in the vicinity. These counts are summarized in Table 3 in the No-Build Conditions section of this report. The 2015 (the latest year for which Georgia DOT data is available) Georgia DOT Average Annual Daily Traffic (AADT) volume on SR 53 north of Sportsman Club Road was 25,600 vehicles per day (vpd).





**Figure 2 – Existing Traffic Volumes**

## Existing Intersection Operations

Existing traffic operations were analyzed at the counted intersections using Synchro software, version 8, in accordance with the methodology presented in the Transportation Research Board's 2010 *Highway Capacity Manual (HCM 2010)*. The *HCM 2010* methodology is presented in Appendix B. The results of the analysis are shown in Table 2. Computer printouts containing detailed results of the analysis are located in Appendix C.

**Table 2 – Existing Intersection Operations**

| Intersection / Approach                       | A.M. Peak Hour |              | P.M. Peak Hour |              |
|-----------------------------------------------|----------------|--------------|----------------|--------------|
|                                               | LOS            | Delay s/veh  | LOS            | Delay s/veh  |
| 1. Sportsman Club Road at Strickland Drive    | A              | 2.6          | A              | 1.6          |
| southbound left turn                          | A              | 0.0          | A              | 0.0          |
| westbound approach                            | A              | 8.8          | A              | 8.9          |
| 2. Dawsonville Highway at Sportsman Club Road | A              | 5.3          | C              | 17.3         |
| northbound approach (turn lane)               | A              | 0.0          | A              | 0.0          |
| southbound approach (Sportsman Club Road)     | <b>F</b>       | <b>224.6</b> | <b>F</b>       | <b>901.3</b> |
| eastbound left turn (GA 53)                   | A              | 9.7          | C              | 15.7         |
| westbound left turn (GA 53)                   | A              | 0.0          | B              | 10.7         |
| 3. Dawsonville Highway at Avonlea Way         | A              | 2.5          | A              | 1.2          |
| northbound left turn (GA 53)                  | C              | 17.6         | B              | 11.4         |
| eastbound left turn                           | <b>F</b>       | <b>275.4</b> | <b>F</b>       | <b>144.1</b> |
| eastbound right turn                          | D              | 26.4         | B              | 13.7         |
| 4. Dawsonville Highway at Canterbury Road     | A              | 3.8          | A              | 1.2          |
| northbound left turn (GA 53)                  | C              | 18.5         | B              | 12.4         |
| eastbound left turn                           | <b>F</b>       | <b>363.9</b> | <b>F</b>       | <b>183.8</b> |
| eastbound right turn                          | D              | 30.1         | B              | 13.5         |
| 5. Dawsonville Highway at Ahaluna Drive       | B              | 16.5         | B              | 12.7         |
| northbound approach (GA 53)                   | A              | 4.6          | A              | 8.6          |
| southbound approach (GA 53)                   | B              | 15.9         | B              | 10.4         |
| eastbound approach                            | D              | 43.6         | C              | 26.1         |
| westbound approach                            | <b>F</b>       | <b>127.8</b> | <b>F</b>       | <b>97.4</b>  |
| 6. Dawsonville Highway at North Lake Square   | A              | 1.7          | B              | 14.8         |
| northbound approach (GA 53)                   | A              | 0.8          | B              | 12.9         |
| southbound approach (GA 53)                   | A              | 1.8          | A              | 8.7          |
| eastbound approach                            | E              | 69.5         | C              | 22.9         |
| westbound approach                            | E              | 70.0         | E              | 68.3         |
| 7. Dawsonville Highway at Beachwood Boulevard | A              | 1.4          | A              | 0.7          |
| northbound left turn (GA 53)                  | C              | 23.0         | B              | 14.0         |
| eastbound left turn                           | <b>F</b>       | <b>393.1</b> | <b>F</b>       | <b>235.1</b> |
| eastbound right turn                          | D              | 28.6         | C              | 16.4         |
| 8. Dawsonville Highway at McEver Road         | D              | 37.1         | <b>F</b>       | <b>98.0</b>  |
| northbound approach (GA 53)                   | E              | 57.3         | <b>F</b>       | <b>105.0</b> |
| southbound approach (GA 53)                   | B              | 17.1         | D              | 54.2         |

|                                             |   |      |          |              |
|---------------------------------------------|---|------|----------|--------------|
| eastbound approach                          | E | 68.5 | <b>F</b> | <b>145.0</b> |
| westbound approach                          | E | 60.1 | E        | 67.2         |
| 9. Dawsonville Highway at Green Hill Circle | B | 11.6 | D        | 40.7         |
| northbound approach (GA 53)                 | A | 6.2  | C        | 31.6         |
| southbound approach (GA 53)                 | B | 10.9 | D        | 48.1         |
| eastbound approach                          | D | 39.5 | E        | 56.2         |
| westbound approach                          | D | 38.1 | E        | 61.3         |
| 10. Dawsonville Highway at Shallowford Road | B | 10.6 | D        | 48.6         |
| northbound approach (GA 53)                 | A | 5.5  | C        | 32.7         |
| southbound approach (GA 53)                 | A | 6.2  | D        | 50.7         |
| eastbound approach                          | E | 75.9 | <b>F</b> | <b>86.2</b>  |
| westbound approach                          | D | 49.9 | E        | 78.0         |

The analysis of the existing conditions reveals generally acceptable traffic operations at the study intersections. However, Dawsonville Highway, McEver Road, and Shallowford Road carry significant through traffic. At unsignalized intersections, the heavy major roadway volumes contribute to high side street delays. At signalized intersections, the side street delays are also high, even at locations with moderate side street volumes, due to the heavy greentime demands placed on the signals by the major street volumes. The existing conditions at each intersection are discussed briefly as follows:

1. **Sportsman Club Road at Strickland Drive** – Operations at this intersection are excellent due to extremely low volumes. This intersection is located very close to the stop sign controlled intersection of Sportsman Club Road at Old Dawsonville Highway. However, the volumes at that intersection are extremely low, also, and the lines of sight between the two intersections are clear. Therefore, no changes are recommended at this intersection for the existing condition.
2. **Dawsonville Highway at Sportsman Club Road** – The overall operations at this intersection are good, but the Sportsman Club Road southbound approach operates with high delays. This is not unusual for side street stop sign controlled approaches at major thoroughfares such as GA 53, and the volumes incurring the high delays are low. The only way to achieve side street delays better than LOS F is to signalize this intersection. However, signalization would introduce new delays to GA 53 and could also increase the potential for rear-end collisions on GA 53. Signalization would require satisfaction of applicable warrants, as proscribed in the Federal Highway Administration's *Manual On Uniform Traffic Control Devices* (MUTCD). While a warrant analysis was not performed as part of this traffic impact study, the low side street volumes make this intersection a weak candidate for signalization in the existing condition. A review of Georgia DOT auxiliary lane standards is provided later in this report, which concludes that a northwest-bound exclusive right turn lane is likely to be justified, based on existing volumes, on GA 53 at Sportsman Club Road.
3. **Dawsonville Highway at Avonlea Way, 4. Dawsonville Highway at Canterbury Road, and 7. Dawsonville Highway at Beachwood Boulevard** – The operations at these three unsignalized intersections are comparable with one another, with the GA 53 approaches operating well, moderate delays for the side

street right turn movements, and high delays for the side street left turn movements. These side street left turn delays are high for the same explanation just provided for Sportsman Club Road. As with that intersection, signalization would be required at these three intersections, in order to reduce the side street left turn delays to better than LOS F. At all three of these intersections, the side street approach volumes are predominately right turners, with extremely low left turn volumes. For this reason, these three intersections are considered unlikely candidates for signalization in the existing condition. No signal warrant analyses were performed at these intersections as part of this traffic study.

5. **Dawsonville Highway at Ahaluna Drive** – While this intersection is signalized, the greentime on the signal heavily favors the GA 53 approaches. This is appropriate given the volume disparity between the GA 53 approaches and the significantly-lower-volume side street approaches. This results in high side street delays, particularly on the westbound approach exiting Ahaluna Drive. A second westbound lane, striped as an exclusive right turn lane, would allow the signal to process more side street traffic with its limited greentime allocation. In addition, this second lane would allow for more right-turns-on-red which are currently trapped behind left and through trips. The addition of this right turn lane would require relocation of the steel strain pole for the signal, a drainage structure, and possibly a large brick monument sign, which could reduce the feasibility of adding this lane. Field observations suggest that there may be an opportunity to shorten the cycle length, which would reduce time spent by vehicles waiting for the side street green signal. A review of Georgia DOT auxiliary lane standards is provided later in this report, which concludes that a northbound exclusive right turn lane should be constructed on GA 53 at Ahaluna Drive in the existing condition. The addition of the second westbound lane on Ahaluna Drive and the northbound exclusive right turn lane on GA 53 will improve operations, but the Ahaluna Drive approach will still operate at LOS F in the a.m. peak hour due to the long cycle length with the greentime heavily favoring GA 53.
6. **Dawsonville Highway at North Lake Square Access** – This intersection operates well in both peak time periods. In the a.m., the side street approach volumes are extremely low, attributed to most or all of the retail on the side street approaches being closed for business at that time. The side street volumes increase notably in the p.m. Side street approach delays are fairly high, though still within acceptable limits. This is attributed to the allocation of the majority of greentime on the signal to the Dawsonville Highway approaches, resulting in long waits on the side streets, even when volumes are low.
8. **Dawsonville Highway at McEver Road** – This is the major intersection in the area, where the route of GA 53 turns from Dawsonville Highway to McEver Road. The lane configuration and signal phasing at this intersection are generally appropriate. The southbound right turn volume is sufficiently-high (828 a.m., 481 p.m.) to merit consideration of the addition of a second exclusive right turn lane and/or the addition of a protected right turn overlap phase. The overlap phase would provide a protected right turn arrow that would operate concurrently with the westbound left turn protected phase on the McEver Road approach. This would replace the red ball indication for that movement which would increase capacity by not requiring each right turner to stop. However, even with these improvements, the intersection will still operate at LOS F in the p.m. peak hour. Finally, there may be an opportunity to reduce the cycle length and fine-tune the signal timing at this intersection.

9. **Dawsonville Highway at Green Hill Circle** – This signalized intersection generally operates acceptably, but does incur some side-street delays, again, due to the allocation of the majority of greentime to the Dawsonville Highway approaches. There may be an opportunity to reduce the cycle length and fine-tune the signal timing at this intersection.
10. **Dawsonville Highway at Shallowford Road** – The lane configuration and signal phasing are appropriate for this intersection. Reduction of the cycle length and optimization of the allocation of greentime could reduce delays and queuing at this intersection.

## Future No-Build Traffic Conditions

A future no-build condition was developed. This represents the traffic conditions that will exist in the future at the date of the full build-out of the proposed Lanier DRI, but not including the Lanier DRI trips. The purpose of the no-build analysis is to isolate the traffic impacts of the proposed development from other growth and development that is expected to occur in the area while the Lanier DRI is under construction.

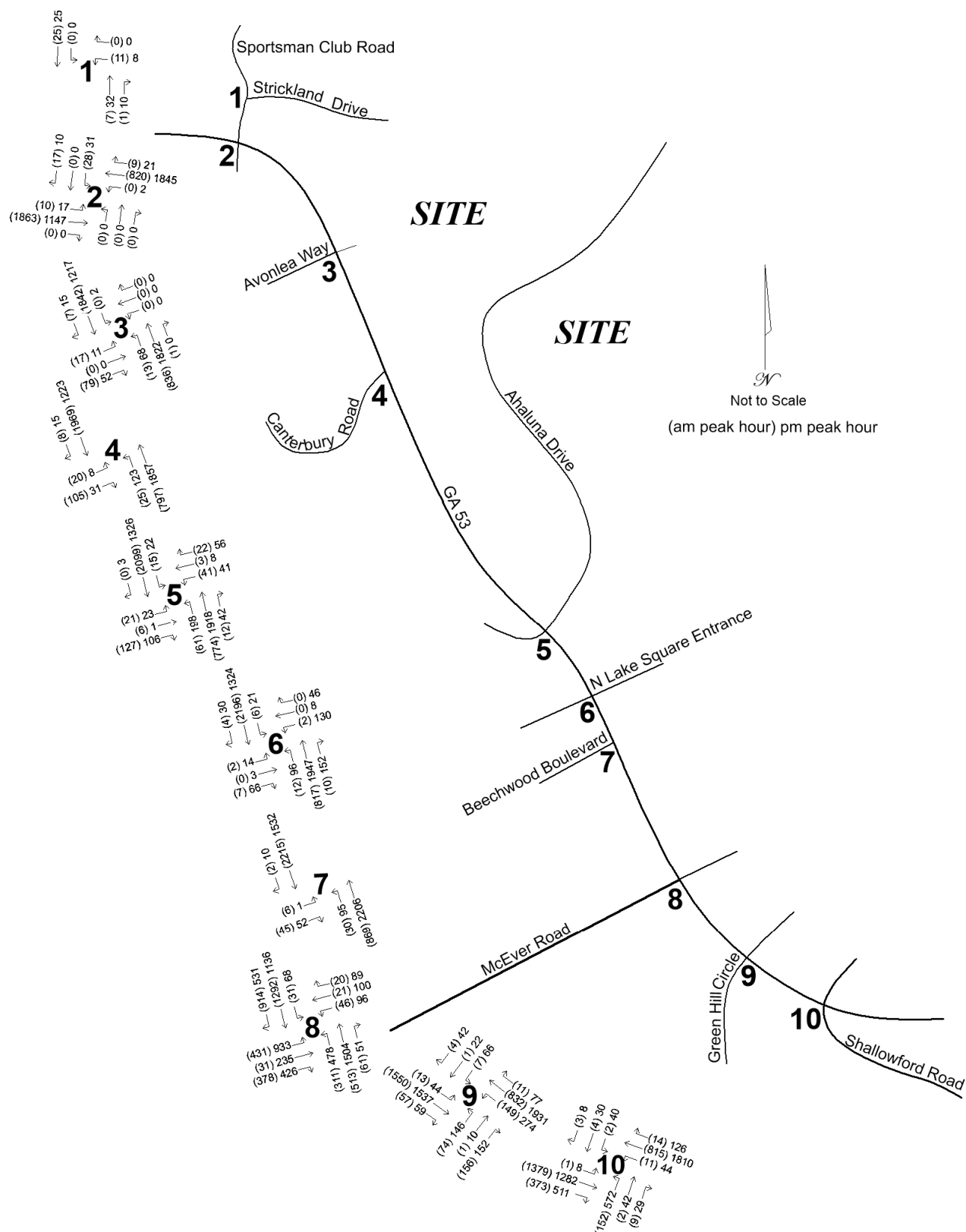
The no-build condition consists of the counted traffic volumes, increased by a general background growth factor. In order to develop the background growth factor, historic Georgia DOT 24-hour traffic counts were collected in the vicinity of the Lanier DRI. These counts were performed from 2011 through 2015 (the latest year for which Georgia DOT data is available) and, according to the Georgia DOT, the counts were adjusted for a variety of factors, including season, in order to arrive at the Average Annual Daily Traffic (AADT) volume. The Georgia DOT AADT counts are summarized in Table 3.

**Table 3 – Georgia DOT Daily Traffic Volume Counts**

| Year              | SR 53<br>N of<br>Sportsman | Annual<br>Growth | McEver<br>W of<br>SR 53 | Annual<br>Growth | Dawsonville<br>S of<br>Shallowford | Annual<br>Growth | Shallowford<br>S of<br>Dawsonville | Annual<br>Growth |
|-------------------|----------------------------|------------------|-------------------------|------------------|------------------------------------|------------------|------------------------------------|------------------|
| <b>Station ID</b> | <b>1390269</b>             |                  | <b>1390274</b>          |                  | <b>1390258</b>                     |                  | <b>1390647</b>                     |                  |
| 2011              | 23,830                     | na               | 21,520                  | na               | 25,950                             | na               | 8,280                              | na               |
| 2012              | 23,520                     | -1.3%            | 21,150                  | -1.7%            | 25,610                             | -1.3%            | 8,140                              | -1.7%            |
| 2013              | 22,730                     | -3.4%            | 20,890                  | -1.2%            | 25,520                             | -0.4%            | 8,090                              | -0.6%            |
| 2014              | 22,700                     | -0.1%            | 20,900                  | 0.0%             | 25,500                             | -0.1%            | 13,300                             | 64.4%            |
| 2015              | 25,600                     | 12.8%            | 21,600                  | 3.3%             | 26,300                             | 3.1%             | 13,700                             | 3.0%             |
| Annual<br>Average |                            | 1.8%             |                         | 0.1%             |                                    | 0.3%             |                                    | 13.4%            |

The annual growth trend has fluctuated from year to year, with generally negative growth during the first few count years, then strong growth in the most recent years. The average annual growth on GA 53 closest to the site has been 1.8%. A modest 2% annual growth factor was applied to the counted volumes when projecting the future no-build volumes. The growth was applied for five years, for a total of 10.4% growth, that will occur while the Lanier Tract DRI is under construction.

The existing, counted traffic volumes were increased by the 10.4% growth factor. The results are the no-build condition traffic volumes that will be on the roadway network in the future when the Lanier Tract DRI is completed, but excluding the Lanier Tract DRI trips. These no-build volumes are shown in Figure 3.



### Figure 3 – Future No-Build Traffic Volumes



## Future No-Build Intersection Operations

No-build traffic operations were analyzed at the counted intersections using Synchro software, version 8, in accordance with the methodology presented in the Transportation Research Board's 2010 *Highway Capacity Manual (HCM 2010)*. The *HCM 2010* methodology is presented in Appendix B. The results of the analysis are shown in Table 4. Computer printouts containing detailed results of the analysis are located in Appendix D.

**Table 4 – Future No-Build Intersection Operations**

| Intersection / Approach                       | A.M. Peak Hour |              | P.M. Peak Hour |                |
|-----------------------------------------------|----------------|--------------|----------------|----------------|
|                                               | LOS            | Delay s/veh  | LOS            | Delay s/veh    |
| 1. Sportsman Club Road at Strickland Drive    | A              | 2.6          | A              | 1.7            |
| southbound left turn                          | A              | 0.0          | A              | 0.0            |
| westbound approach                            | A              | 8.9          | A              | 8.9            |
| 2. Dawsonville Highway at Sportsman Club Road | B              | 11.8         | D              | 34.3           |
| northbound approach (turn lane)               | A              | 0.0          | A              | 0.0            |
| southbound approach (Sportsman Club Road)     | <b>F</b>       | <b>496.6</b> | <b>F</b>       | <b>1,780.7</b> |
| eastbound left turn (GA 53)                   | B              | 10.3         | C              | 17.9           |
| westbound left turn (GA 53)                   | A              | 0.0          | B              | 11.3           |
| 3. Dawsonville Highway at Avonlea Way         | A              | 4.5          | A              | 1.5            |
| northbound left turn (GA 53)                  | C              | 20.4         | B              | 12.2           |
| eastbound left turn                           | <b>F</b>       | <b>552.3</b> | <b>F</b>       | <b>229.1</b>   |
| eastbound right turn                          | D              | 33.7         | B              | 14.7           |
| 4. Dawsonville Highway at Canterbury Road     | A              | 6.7          | A              | 1.7            |
| northbound left turn (GA 53)                  | C              | 21.7         | B              | 13.7           |
| eastbound left turn                           | <b>F</b>       | <b>715.5</b> | <b>F</b>       | <b>349.9</b>   |
| eastbound right turn                          | E              | 41.5         | B              | 14.4           |
| 5. Dawsonville Highway at Ahaluna Drive       | C              | 22.3         | B              | 15.5           |
| northbound approach (GA 53)                   | A              | 5.6          | B              | 11.5           |
| southbound approach (GA 53)                   | C              | 22.7         | B              | 14.0           |
| eastbound approach                            | E              | 58.3         | C              | 23.8           |
| westbound approach                            | <b>F</b>       | <b>139.1</b> | <b>F</b>       | <b>96.6</b>    |
| 6. Dawsonville Highway at North Lake Square   | A              | 3.2          | B              | 16.6           |
| northbound approach (GA 53)                   | A              | 1.0          | B              | 14.8           |
| southbound approach (GA 53)                   | A              | 3.9          | B              | 10.7           |
| eastbound approach                            | E              | 69.5         | C              | 21.8           |
| westbound approach                            | E              | 70.0         | E              | 68.1           |
| 7. Dawsonville Highway at Beachwood Boulevard | A              | 2.6          | A              | 0.9            |
| northbound left turn (GA 53)                  | D              | 28.6         | C              | 15.8           |
| eastbound left turn                           | <b>F</b>       | <b>866.6</b> | <b>F</b>       | <b>375.6</b>   |
| eastbound right turn                          | E              | 36.2         | C              | 18.4           |
| 8. Dawsonville Highway at McEver Road         | D              | 45.7         | <b>F</b>       | <b>127.3</b>   |
| northbound approach (GA 53)                   | E              | 67.7         | <b>F</b>       | <b>135.0</b>   |

|                                             |          |             |          |              |
|---------------------------------------------|----------|-------------|----------|--------------|
| southbound approach (GA 53)                 | C        | 20.0        | E        | 57.9         |
| eastbound approach                          | <b>F</b> | <b>92.6</b> | <b>F</b> | <b>208.0</b> |
| westbound approach                          | E        | 61.8        | E        | 70.6         |
| 9. Dawsonville Highway at Green Hill Circle | B        | 14.2        | E        | 65.1         |
| northbound approach (GA 53)                 | A        | 8.2         | E        | 70.6         |
| southbound approach (GA 53)                 | B        | 13.5        | D        | 54.3         |
| eastbound approach                          | D        | 44.0        | E        | 58.1         |
| westbound approach                          | D        | 38.8        | <b>F</b> | <b>112.9</b> |
| 10. Dawsonville Highway at Shallowford Road | B        | 12.5        | E        | 73.1         |
| northbound approach (GA 53)                 | A        | 6.0         | E        | 72.0         |
| southbound approach (GA 53)                 | A        | 9.1         | E        | 57.5         |
| eastbound approach                          | E        | 76.3        | <b>F</b> | <b>119.5</b> |
| westbound approach                          | D        | 49.9        | E        | 77.7         |

The analysis of the no-build condition reveals increases in delays at each of the study intersections, as would be expected. The no-build analysis did not include any of the potential mitigation discussed in the existing analysis. The no-build condition at each intersection is discussed briefly as follows:

- 1. Sportsman Club Road at Strickland Drive** – Operations at this intersection will continue to be excellent in the no-build condition. Therefore, no changes are recommended at this intersection for the no-build condition.
- 2. Dawsonville Highway at Sportsman Club Road** – The side street delays will become very high in the no-build condition. However, the volumes incurring these delays will remain modest and it is considered unlikely that this intersection would be a good candidate for signalization.
- 3. Dawsonville Highway at Avonlea Way, 4. Dawsonville Highway at Canterbury Road, and 7. Dawsonville Highway at Beachwood Boulevard** – The no-build operations at these three unsignalized intersections will be comparable to the existing condition, with the GA 53 approaches operating well, moderate delays for the side street right turn movements, and high delays for the side street left turn movements. As with the existing condition, at all three of these intersections, the side street volumes are predominately right turners, with extremely low left turn volumes. For this reason, these three intersections are expected to be unlikely candidates for signalization in the no-build condition.
- 5. Dawsonville Highway at Ahaluna Drive** – The Ahaluna Drive approach will continue to operate at LOS F and the delays will increase. The mitigation discussed in the existing condition is still applicable.
- 6. Dawsonville Highway at North Lake Square Access** – This intersection will operate comparably in the no-build condition, as in the existing condition. No mitigation is identified for this intersection in the no-build condition.
- 8. Dawsonville Highway at McEver Road** – Operations will continue to be congested at this intersection. The mitigation discussed in the existing condition is still applicable.

9. **Dawsonville Highway at Green Hill Circle** – Delays will increase from the existing to no-build conditions. A.M. peak operations will continue to be acceptable, while the p.m. peak will teeter between LOS E and LOS F. No new mitigation is identified for the no-build condition.
10. **Dawsonville Highway at Shallowford Road** – As with the other intersections, no new mitigation is identified for the no-build condition. Delays will increase from the existing condition, but will generally remain acceptable in the a.m. and at the LOS E to LOS F threshold in the p.m.

## Lanier Tract Traffic Characteristics

This section describes the anticipated traffic characteristics of the proposed Lanier Tract development, including a site description, how much traffic the project will generate, and where that traffic will travel.

### Project Description

The Lanier Tract DRI is a primarily senior-age-restricted residential community that will be developed generally along Ahaluna Drive and Strickland Drive. There will be an office/retail node along GA 53, north of Avonlea Way. A fire station of 10,650 square feet is also proposed to be constructed along GA 53 in conjunction with this development. Vehicular access will be provided at several locations, primarily along Ahaluna Drive, with connections to GA 53 via Strickland Drive, at the median opening at Avonlea Way, and through adjacent outparcels (which will be discussed in the Future Phase Two section of this report), aligning with Canterbury Road. The office/retail node will have a two right-in / right-out accesses directly on GA 53, with no anticipated internal connection to the balance of the development. The site plan is presented in Figure 4.

### Trip Generation

The volume of traffic that will be generated by the proposed Lanier Tract DRI was calculated using the equations and rates in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 9<sup>th</sup> Edition. The trip generation for all of the detached homes was calculated using ITE Land Use 251 – Senior Adult Housing – Detached. The trips for the independent living units were calculated using ITE Land Use 253 – Congregate Care Facility. The trips for the assisted living facility were determined using ITE Land Use – 254 – Assisted Living. The storage facility trips were calculated using ITE Land Use 151 – Mini-Warehouse. The office / retail trip generation was calculated by dividing the total square footage of that commercial node in half and applying ITE Land Use 820 – Shopping Center to half of the square footage and ITE Land Use 750 – Office Park to the other half.

No multi-use adjustment was applied to the raw trip generation to account for the mixed-use nature of the project, because the office/retail node is not connected internally with the balance of the project. The retail trip generation was adjusted to account for pass-by trips. Pass-by trips are trips to the retail that are currently driving on GA 53 and which will turn into the site for shopping purposes then continue on the trip they are already making. The ITE *Trip Generation Manual* provides an average p.m. peak hour pass-by percentage of 38% for the shopping center land use. However, the plan for this development, with the retail mixed with office, suggests that this retail may be highly destination-oriented. To be conservative, a 25% pass-by adjustment was made for the p.m. peak hour trips, while a 15% adjustment was applied to the a.m. peak hour and 24-hour volumes.

The fire station will be located on the GA 53 adjacent to the project and will serve not just this project, but also the surrounding community. The trips that will be generated by the fire station are expected to be very low. Therefore, the trip generation of the fire station was excluded from this calculation.

The trip generation calculations are shown in Table 5.



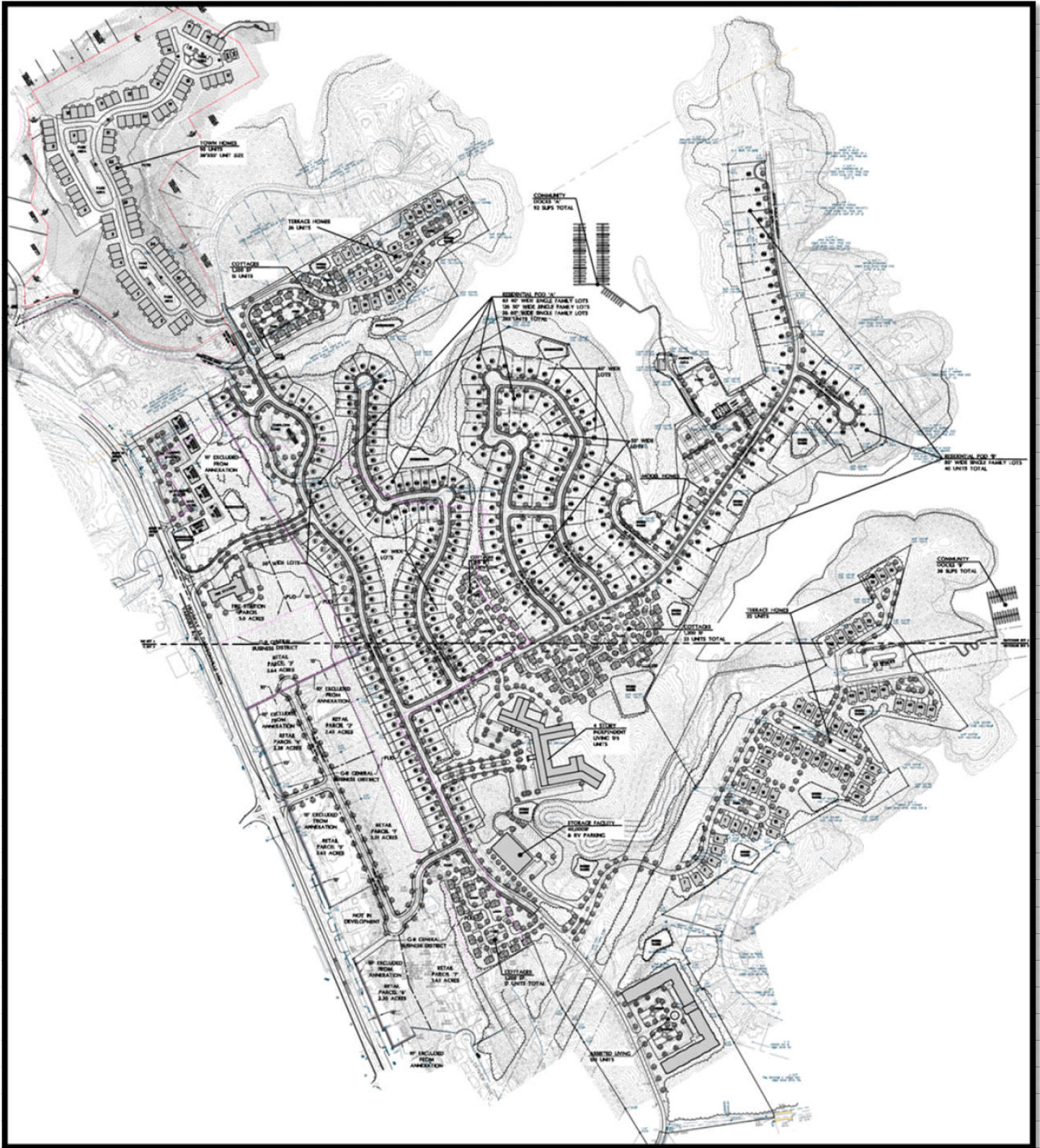


Figure 4 – Lanier Tract Site Plan

**Table 5 – Lanier Tract Trip Generation**

| Land Use                               | ITE Code | Size                   | A.M. Peak Hour |           |           | P.M. Peak Hour |           |            | 24-Hour    |
|----------------------------------------|----------|------------------------|----------------|-----------|-----------|----------------|-----------|------------|------------|
|                                        |          |                        | In             | Out       | Total     | In             | Out       | Total      | 2-Way      |
| Terrace Homes Detached (at Strickland) | 251      | 26 homes               | 2              | 4         | 6         | 4              | 3         | 7          | 96         |
| Cottages Detached (at Strickland)      | 251      | 15 homes               | 1              | 2         | 3         | 2              | 2         | 4          | 56         |
| Pod A Single Family Detached           | 251      | 265 homes              | 20             | 38        | 58        | 44             | 28        | 72         | 976        |
| Pod B Single Family Detached           | 251      | 40 homes               | 3              | 6         | 9         | 6              | 5         | 11         | 147        |
| Cottages Detached                      | 251      | 64 homes               | 5              | 9         | 14        | 11             | 6         | 17         | 236        |
| Terrace Homes Detached                 | 251      | 55 homes               | 4              | 8         | 12        | 9              | 6         | 15         | 202        |
| Independent Living                     | 253      | 175 units              | 6              | 5         | 11        | 16             | 14        | 30         | 354        |
| Assisted Living                        | 254      | <u>150 beds</u>        | <u>14</u>      | <u>7</u>  | <u>21</u> | <u>15</u>      | <u>18</u> | <u>33</u>  | <u>356</u> |
| Total Residential New Trips            |          | 790 units              | 55             | 79        | 134       | 107            | 82        | 189        | 2,423      |
|                                        |          |                        |                |           |           |                |           |            |            |
| Storage                                | 151      | 40,000 ft <sup>2</sup> | 3              | 3         | 6         | 5              | 5         | 10         | 100        |
|                                        |          |                        |                |           |           |                |           |            |            |
| Office                                 | 750      | 12,000 ft <sup>2</sup> | 18             | 3         | 21        | 2              | 16        | 18         | 138        |
| Retail Total Trips                     | 820      | 12,000 ft <sup>2</sup> | 7              | 5         | 12        | 21             | 24        | 45         | 512        |
| -pass-by                               |          | 15/25/15%              | <u>-1</u>      | <u>-1</u> | <u>-2</u> | <u>-5</u>      | <u>-6</u> | <u>-11</u> | <u>-76</u> |
| Retail New Trips                       |          |                        | <u>6</u>       | <u>4</u>  | <u>10</u> | <u>16</u>      | <u>18</u> | <u>34</u>  | <u>436</u> |
| Total Commercial New Trips             |          |                        | 24             | 7         | 31        | 18             | 34        | 52         | 574        |
|                                        |          |                        |                |           |           |                |           |            |            |
| Total Project New Trips                |          |                        | 82             | 89        | 171       | 130            | 121       | 251        | 3,097      |

Notes: The detached homes trip calculations employed ITE average rates due to numbers of units generally much smaller than average sizes in the ITE data. The office and retail calculations were based on ITE average rates due to square footages much smaller than average sizes in the ITE data.

### Willow Springs Townhomes

A small development of 90 senior-age-restricted townhomes is anticipated to be developed concurrently with the Lanier Tract DRI, along Karen Lane (shown in the site plan in Figure 4 at the northern end of the site, bordered in red). The trips for this development were calculated using ITE Land Use 252 – Senior Adult Housing – Attached. The Willow Springs trips are shown in Table 6.

**Table 6 – Willow Springs Townhomes Trip Generation**

| Land Use                        | ITE Code | Size | A.M. Peak Hour |     |       | P.M. Peak Hour |     |       | 24-Hour |
|---------------------------------|----------|------|----------------|-----|-------|----------------|-----|-------|---------|
|                                 |          |      | In             | Out | Total | In             | Out | Total | 2-Way   |
| Senior Adult Housing - Attached | 252      | 90   | 6              | 12  | 18    | 12             | 11  | 23    | 290     |

## Trip Distribution and Assignment

The trip distribution percentages indicate what proportion of the project's trips will travel to and from various directions. The new trips were distributed based on the locations and proximity of likely trip origins and destinations for each land use. The residential trips, including the Willow Springs Townhomes, were distributed based on the locations of urban centers and retail nodes, while the office and retail trips were distributed based on population densities. The new project trips, shown in Table 5, were assigned to the roadway network based on these distribution percentages. Pass-by trips were assigned, where appropriate, based on existing traffic flows passing the site. The new trip distribution percentages for each land use, and the total peak hour trips expected to be generated by the site, are shown in Figure 5. The Willow Springs trips, shown in Table 6, were distributed to the study intersections using the same distribution as the Lanier Tract residential trips. These trips are not included in the site generated trips shown in Figure 5, but they are included in the future analysis. Appendix A contains intersection volume worksheets that show the specific Willow Springs trips (as well as all other Lanier Tract residential, office, and retail trips) for each movement at each intersection.



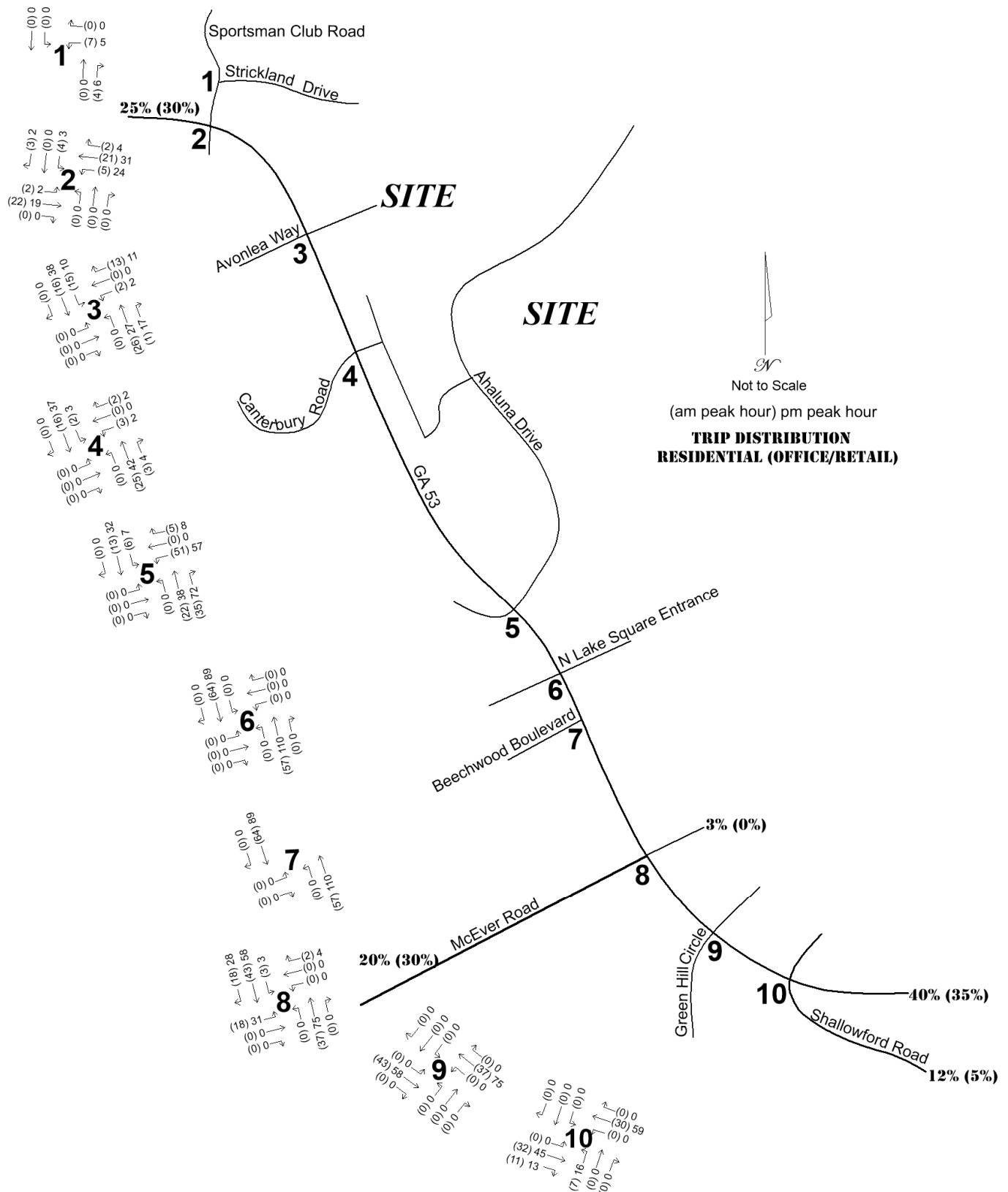


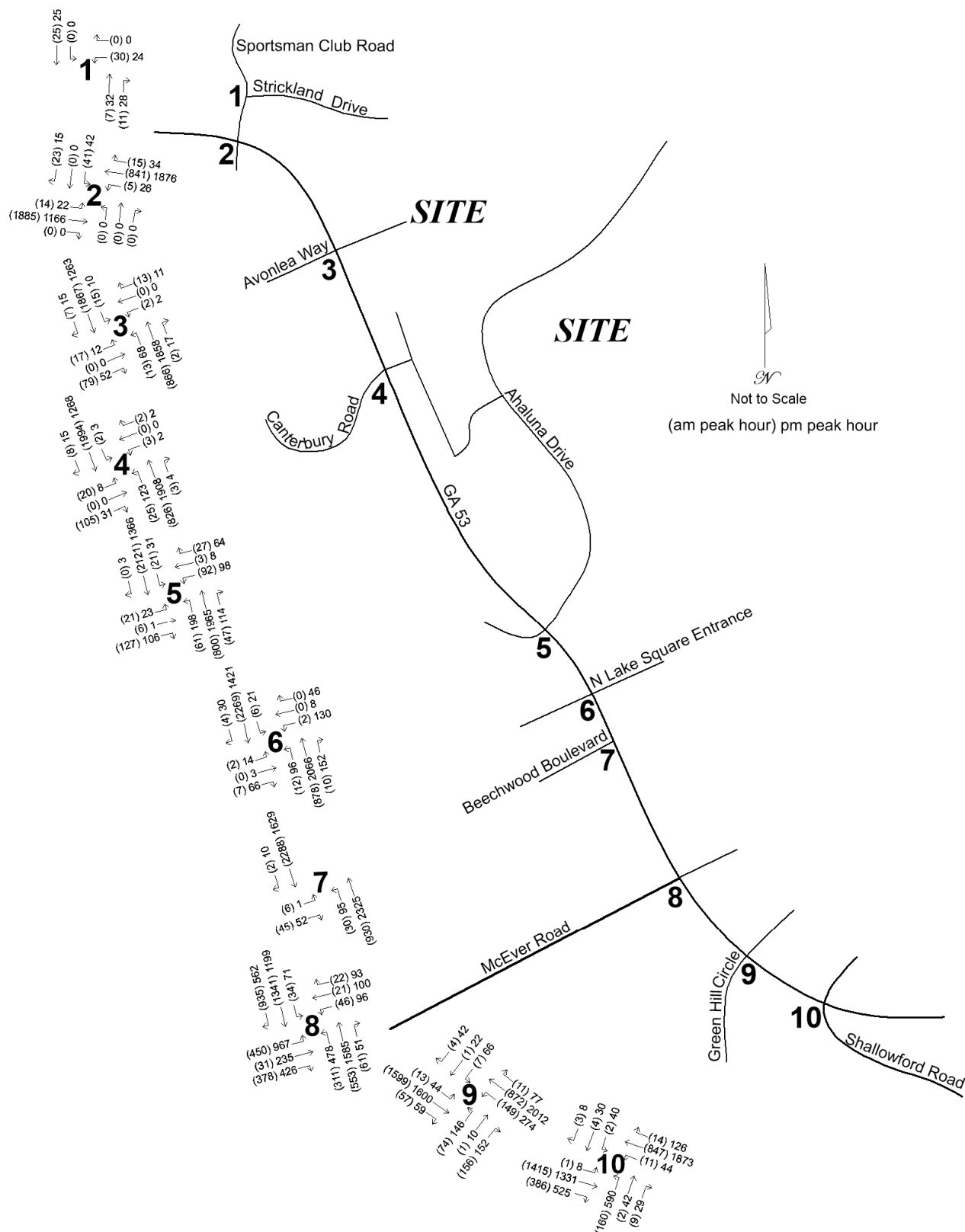
Figure 5 – New Trip Distribution Percentages and Total Lanier Tract Trips

## Future Phase One Traffic Conditions

This section describes the anticipated future traffic conditions after the Lanier Tract DRI is fully constructed and operational.

### Future Phase One Traffic Volumes

The trips from the Lanier Tract DRI (and Willow Springs) were added to the future no-build volumes (comprised of the counted volumes increased by 10.4%, as described previously). The resulting volumes are the traffic volumes that will be at each intersection when the Lanier Tract is fully operational. A strip of land between the Lanier Tract and the east side of GA 53 is anticipated to be developed by others with retail outparcels at some future date. The impact of this outparcel development is evaluated in the Future Phase Two analysis, discussed later in this report. However, as part of the Lanier Tract development, a roadway will be constructed through that strip of land, to connect the Lanier Tract to GA 53 at the existing median break at Canterbury Road. The Future Phase One volumes and analysis include this connection. The Future Phase One traffic volume projections are shown in Figure 6. These volumes are also shown in the intersection volume worksheets in Appendix A.



### Figure 6 – Future Phase One Peak Hour Traffic Volume Projections

## Future Phase One Intersection Operations

An operational analysis was performed for the Future Phase One conditions. Table 7 presents the results of this analysis. Computer printouts containing detailed results of the analysis are located in Appendix E.

**Table 7 – Future Phase One Intersection Operations**

| Intersection / Approach                       | A.M. Peak Hour |                | P.M. Peak Hour |                |
|-----------------------------------------------|----------------|----------------|----------------|----------------|
|                                               | LOS            | Delay s/veh    | LOS            | Delay s/veh    |
| 1. Sportsman Club Road at Strickland Drive    | A              | 4.2            | A              | 3.2            |
| southbound left turn                          | A              | 0.0            | A              | 0.0            |
| westbound approach                            | A              | 9.1            | A              | 9.2            |
| 2. Dawsonville Highway at Sportsman Club Road | C              | 23.0           | <b>F</b>       | <b>74.4</b>    |
| northbound approach (turn lane)               | A              | 0.0            | A              | 0.0            |
| southbound approach (Sportsman Club Road)     | <b>F</b>       | <b>834.4</b>   | <b>F</b>       | <b>2,872.3</b> |
| eastbound left turn (GA 53)                   | B              | 10.4           | C              | 18.7           |
| westbound left turn (GA 53)                   | C              | 20.5           | B              | 11.7           |
| 3. Dawsonville Highway at Avonlea Way         | A              | 9.8            | A              | 4.2            |
| northbound left turn (GA 53)                  | C              | 20.8           | B              | 12.6           |
| southbound left turn                          | B              | 10.3           | C              | 17.9           |
| eastbound left turn                           | <b>F</b>       | <b>1,381.4</b> | <b>F</b>       | <b>653.3</b>   |
| eastbound right turn                          | D              | 34.9           | C              | 15.1           |
| westbound left turn                           | <b>F</b>       | <b>288.1</b>   | <b>F</b>       | <b>696.5</b>   |
| westbound right turn                          | B              | 12.1           | C              | 20.5           |
| 4. Dawsonville Highway at Canterbury Road     | B              | 12.4           | A              | 3.8            |
| northbound left turn (GA 53)                  | C              | 22.2           | B              | 14.2           |
| southbound left turn                          | B              | 10.1           | C              | 17.8           |
| eastbound left turn                           | <b>F</b>       | <b>1,504.7</b> | <b>F</b>       | <b>767.5</b>   |
| eastbound right turn                          | E              | 43.3           | B              | 14.8           |
| westbound left turn                           | <b>F</b>       | <b>436.1</b>   | <b>F</b>       | <b>1,069.5</b> |
| westbound right turn                          | B              | 11.8           | C              | 20.0           |
| 5. Dawsonville Highway at Ahaluna Drive       | C              | 31.7           | C              | 21.4           |
| northbound approach (GA 53)                   | A              | 6.8            | B              | 15.7           |
| southbound approach (GA 53)                   | D              | 35.3           | C              | 20.4           |
| eastbound approach                            | D              | 46.8           | B              | 17.5           |
| westbound approach                            | <b>F</b>       | <b>134.1</b>   | <b>F</b>       | <b>104.1</b>   |
| 6. Dawsonville Highway at North Lake Square   | A              | 3.9            | B              | 17.4           |
| northbound approach (GA 53)                   | A              | 1.1            | B              | 15.9           |
| southbound approach (GA 53)                   | A              | 4.9            | B              | 11.8           |
| eastbound approach                            | E              | 69.5           | C              | 21.8           |
| westbound approach                            | E              | 70.0           | E              | 68.1           |
| 7. Dawsonville Highway at Beachwood Boulevard | A              | 3.3            | A              | 0.9            |
| northbound left turn (GA 53)                  | D              | 30.7           | C              | 17.1           |
| eastbound left turn                           | <b>F</b>       | <b>1,230.3</b> | <b>F</b>       | <b>534.2</b>   |

|                                             |          |              |          |              |
|---------------------------------------------|----------|--------------|----------|--------------|
| eastbound right turn                        | E        | 39.4         | C        | 19.8         |
| 8. Dawsonville Highway at McEver Road       | D        | 50.9         | <b>F</b> | <b>142.6</b> |
| northbound approach (GA 53)                 | E        | 77.0         | <b>F</b> | <b>161.1</b> |
| southbound approach (GA 53)                 | C        | 21.9         | E        | 59.3         |
| eastbound approach                          | <b>F</b> | <b>104.0</b> | <b>F</b> | <b>230.3</b> |
| westbound approach                          | E        | 60.9         | E        | 74.4         |
| 9. Dawsonville Highway at Green Hill Circle | B        | 14.9         | E        | 67.3         |
| northbound approach (GA 53)                 | A        | 8.6          | E        | 72.6         |
| southbound approach (GA 53)                 | B        | 14.3         | E        | 56.9         |
| eastbound approach                          | D        | 47.1         | E        | 59.7         |
| westbound approach                          | D        | 38.8         | <b>F</b> | <b>119.2</b> |
| 10. Dawsonville Highway at Shallowford Road | B        | 13.3         | E        | 78.6         |
| northbound approach (GA 53)                 | A        | 6.2          | E        | 73.6         |
| southbound approach (GA 53)                 | B        | 10.1         | E        | 66.1         |
| eastbound approach                          | E        | 76.5         | <b>F</b> | <b>128.7</b> |
| westbound approach                          | D        | 49.9         | E        | 77.7         |

A note is made here about the high delays accompanying some of the LOS F. As delays increase, the model's average delay per vehicle projections exceed model capabilities and the results become unrealistic. For example, it is highly improbable that the eastbound left turn from Canterbury Road will incur an average delay of 1,504.7 seconds, or 25 minutes, per vehicle. These high delay numbers are reported to provide an indication of the severity of the LOS F, and were reviewed with engineering judgment when developing conclusions and recommendations.

The operational analysis of Future Phase One conditions reveals some increases in delays from the no-build condition. The most notable changes are increases in the side street delays at both unsignalized and signalized intersections. The Lanier Tract DRI generally contributes a small proportion to the increases in volumes between the existing condition and the Future Phase One, while the background growth contributes a significant proportion of the increases. At most intersections, aside from the site access points along GA 53, the Lanier Tract DRI will contribute primarily to the major roadway through movements. The project's most significant impact will occur at four locations – Sportsman Club Road at GA 53, Avonlea Way at GA 53, Canterbury Road at GA 53, and Ahaluna Drive at GA 53, with the greatest impact being at Ahaluna Drive. The Future Phase One condition at each intersection is discussed briefly as follows:

1. **Sportsman Club Road at Strickland Drive** – Operations at this intersection are will continue to be excellent in the no-build condition. Therefore, no changes are recommended at this intersection for the Future Phase One condition.
2. **Dawsonville Highway at Sportsman Club Road** – The side street delays will continue to be very high in the future. However, the volumes incurring these delays will remain modest and it is considered unlikely that this intersection would be a good candidate for signalization, even in the Future Phase One condition.

3. **Dawsonville Highway at Avonlea Way** – The Lanier Tract DRI will replace the existing private driveway at this location, with a main access to the project. The alignment with the median break will allow full movement operations at this site access. However, it is anticipated that volumes using this access will be modest for a few reasons. First, most of the site trips will be oriented to and from the south on GA 53. Therefore, the propensity of most trips will be to travel along Ahaluna Drive to the signal at GA 53, rather than to turn in and out of the unsignalized access across from Avonlea Way. Some trips traveling to and from the north will use this access and some will use the connection through the site to Strickland Drive. For these reasons, the volumes exiting the site at this location will be low, and will include more right turners than left turners. On the existing eastbound approach of Avonlea Way, the right turn volumes are also notably higher than the left turners. This is an indication that this intersection is unlikely to meet warrants for signalization in the future. No signal warrant analysis was performed at this intersection as part of this study. A right turn lane analysis (presented later) was performed for the northbound direction of GA 53 at the site access at Avonlea Way. The analysis indicates that it is likely that a right turn lane will be justified at this location in the Future Phase One condition and the site plan includes this lane.
4. **Dawsonville Highway at Canterbury Road** – As with the Avonlea intersection, the volumes entering and exiting the Lanier Tract at Canterbury will be very low. The circuitous road configuration through the adjacent future retail tracts will further discourage use of this access. Therefore, for Future Phase One, this intersection is considered unlikely to meet signal warrants. No signal warrant analysis was performed at this intersection as part of this study. A right turn lane analysis (presented later) was performed for the northbound direction of GA 53 at the site access at Canterbury Road. The analysis indicates that it is *not* likely that a right turn lane will be justified at this location in the Future Phase One condition.
5. **Dawsonville Highway at Ahaluna Drive** – The Ahaluna Drive approach will continue to operate at LOS F and the delays will increase. The mitigation discussed in the existing condition is still applicable, including the addition of a northbound right turn lane on GA 53 and a second westbound lane on Ahaluna Drive.
6. **Dawsonville Highway at North Lake Square Access** – This intersection will operate comparably in the future as in the existing and no-build conditions. No mitigation is identified for this intersection in the Future Phase One condition.
7. **Dawsonville Highway at Beachwood Boulevard** – The operations at this unsignalized intersections will continue comparable to the existing and no-build conditions, with the GA 53 approaches operating well, moderate delays for the side street right turn movement, and high delays for the side street left turn movement. The side street volumes will continue to be predominately right turners, with extremely low left turn volumes. For this reason, this intersection is considered unlikely to meet warrants for signalization in the future.
8. **Dawsonville Highway at McEver Road** – Operations will continue to be congested at this intersection, with the overall intersection operating at LOS F in the p.m., and several approaches operating at LOS F in the a.m. and/or p.m. The mitigation discussed in the existing condition is still applicable. This intersection is built-out and the mitigation discussed in the existing analysis includes the addition of a second

southbound right turn lane. Short of widening GA 53 with additional through lanes, or reducing volumes at this intersection, there are not many additional options to mitigate the high delays.

9. **Dawsonville Highway at Green Hill Circle** – Delays will increase from the no-build condition to the future. A.M. peak operations will continue to be acceptable, while the p.m. peak will teeter between LOS E and LOS F. No new mitigation is identified for the Future Phase One condition.
10. **Dawsonville Highway at Shallowford Road** – Delays will increase from the no-build condition, but will generally remain acceptable in the a.m. and at the LOS E to LOS F threshold in the p.m. No new mitigation is identified for the Future Phase One condition.



## Future Phase Two Traffic Conditions

A strip of land along the east side of GA 53, west of the Lanier Tract, is anticipated to be developed by others at some future date. A Future Phase Two condition was developed to assess the traffic operations after this land is developed.

The land is anticipated to be developed as seven outparcels, with 8,000 square feet of retail shopping on each, for a total of 56,000 square feet of retail shopping. The trip generation of the outparcels is presented in Table 8.

**Table 8 – Outparcel Trip Generation**

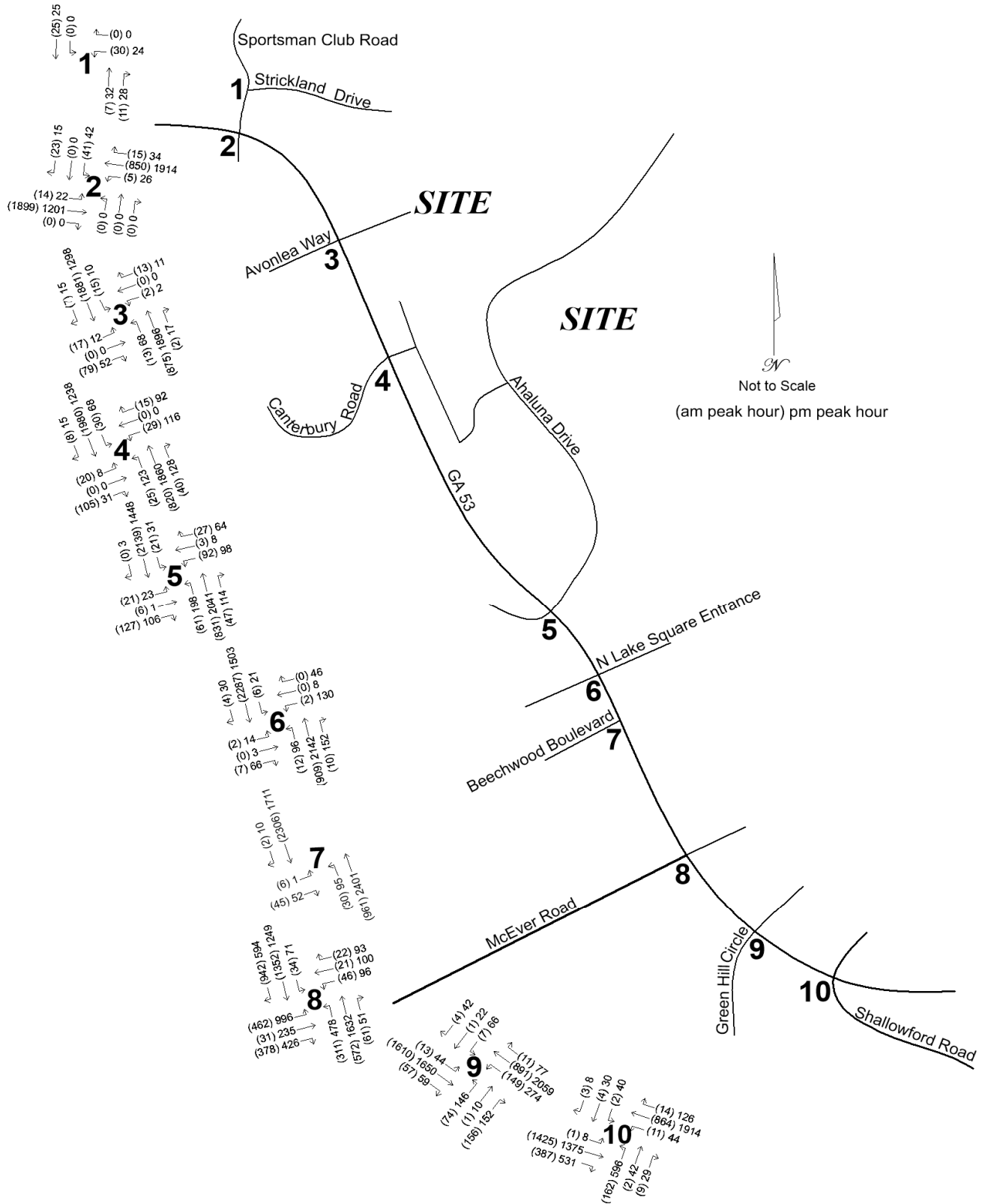
| Land Use              | ITE Code | Size                   | A.M. Peak Hour |            |            | P.M. Peak Hour |            |             | 24-Hour       |
|-----------------------|----------|------------------------|----------------|------------|------------|----------------|------------|-------------|---------------|
|                       |          |                        | In             | Out        | Total      | In             | Out        | Total       | 2-Way         |
| Outparcel Total Trips | 820      | 56,000 ft <sup>2</sup> | 68             | 41         | 109        | 195            | 211        | 406         | 4,658         |
| -pass-by              |          | 30/40/30%              | <u>-20</u>     | <u>-12</u> | <u>-32</u> | <u>-78</u>     | <u>-84</u> | <u>-162</u> | <u>-1,398</u> |
| Outparcel New Trips   |          |                        | 48             | 29         | 77         | 117            | 127        | 244         | 3,260         |

The outparcels will be served by a full movement access that will align with the existing median break on GA 53 at Canterbury Road. A connecting roadway will run through the outparcel property and connect to the main roadway through the western portion of the Lanier Tract (connecting Strickland Drive to Ahaluna Drive). The connecting roadway through the outparcel property was assumed to be constructed during the development of the Lanier Tract, and was included in the Future Phase One analysis, as discussed previously. This will allow trips from the proposed Lanier Tract to access GA 53.

The trips that will be generated by the outparcels were distributed to the study intersections using the same trip distribution percentages developed for the retail portion of the Lanier Tract DRI (with one minor difference – five percent of the outparcel trips were distributed back into the Lanier Tract, in anticipation of the trips that will travel between the outparcels and the Lanier Tract DRI. This five percent was subtracted from the south, to and from McEver Road). The Lanier Tract distribution percentages were shown previously in this report, in Figure 5.

## Future Phase Two Traffic Volumes

The trips from the outparcels were added to the Future Phase One volumes (comprised of the counted volumes increased by 10.4%, plus the Lanier Tract and Willow Springs trips, as described previously). The resulting volumes are the traffic volumes that will be at each intersection when the outparcels are developed and operational. The Future Phase Two traffic volume projections are shown in Figure 7. These volumes are also shown in the intersection volume worksheets in Appendix A.



**Figure 7 – Future Phase Two Peak Hour Traffic Volume Projections**

## Future Phase Two Intersection Operations

An operational analysis was performed for the Future Phase Two conditions. Table 9 presents the results of this analysis. Computer printouts containing detailed results of the analysis are located in Appendix E.

**Table 9 – Future Phase Two Intersection Operations**

| Intersection / Approach                       | A.M. Peak Hour |                | P.M. Peak Hour |                 |
|-----------------------------------------------|----------------|----------------|----------------|-----------------|
|                                               | LOS            | Delay s/veh    | LOS            | Delay s/veh     |
| 1. Sportsman Club Road at Strickland Drive    | A              | 4.2            | A              | 3.2             |
| southbound left turn                          | A              | 0.0            | A              | 0.0             |
| westbound approach                            | A              | 9.1            | A              | 9.2             |
| 2. Dawsonville Highway at Sportsman Club Road | C              | 23.7           | <b>F</b>       | <b>74.3</b>     |
| northbound approach (turn lane)               | A              | 0.0            | A              | 0.0             |
| southbound approach (Sportsman Club Road)     | <b>F</b>       | <b>866.3</b>   | <b>F</b>       | <b>3,330.7</b>  |
| eastbound left turn (GA 53)                   | B              | 10.5           | C              | 19.2            |
| westbound left turn (GA 53)                   | C              | 20.8           | B              | 11.9            |
| 3. Dawsonville Highway at Avonlea Way         | B              | 11.1           | A              | 4.5             |
| northbound left turn (GA 53)                  | C              | 21.1           | B              | 12.8            |
| southbound left turn                          | B              | 10.4           | C              | 18.4            |
| eastbound left turn                           | <b>F</b>       | <b>1,593.4</b> | <b>F</b>       | <b>722.2</b>    |
| eastbound right turn                          | E              | 35.6           | C              | 15.5            |
| westbound left turn                           | <b>F</b>       | <b>311.5</b>   | <b>F</b>       | <b>833.9</b>    |
| westbound right turn                          | B              | 12.2           | C              | 21.0            |
| 4. Dawsonville Highway at Canterbury Road     | D              | 29.0           | <b>F</b>       | <b>852.3</b>    |
| northbound left turn (GA 53)                  | C              | 22.0           | B              | 13.9            |
| southbound left turn                          | B              | 10.5           | C              | 20.7            |
| eastbound left turn                           | <b>F</b>       | <b>1,733.4</b> | <b>F</b>       | <b>2,303.8</b>  |
| eastbound right turn                          | E              | 42.2           | B              | 14.6            |
| westbound left turn                           | <b>F</b>       | <b>1712.5</b>  | <b>F</b>       | <b>19,977.6</b> |
| westbound right turn                          | B              | 12.2           | D              | 33.7            |
| 5. Dawsonville Highway at Ahaluna Drive       | C              | 32.6           | C              | 22.8            |
| northbound approach (GA 53)                   | A              | 6.8            | B              | 17.0            |
| southbound approach (GA 53)                   | D              | 37.1           | C              | 22.3            |
| eastbound approach                            | D              | 46.8           | B              | 17.7            |
| westbound approach                            | <b>F</b>       | <b>134.1</b>   | <b>F</b>       | <b>106.1</b>    |
| 6. Dawsonville Highway at North Lake Square   | A              | 4.0            | B              | 18.2            |
| northbound approach (GA 53)                   | A              | 1.2            | B              | 16.7            |
| southbound approach (GA 53)                   | A              | 5.1            | B              | 13.1            |
| eastbound approach                            | E              | 69.5           | C              | 21.8            |
| westbound approach                            | E              | 70.0           | E              | 68.1            |
| 7. Dawsonville Highway at Beachwood Boulevard | A              | 3.3            | A              | 1.0             |
| northbound left turn (GA 53)                  | D              | 31.5           | C              | 18.4            |
| eastbound left turn                           | <b>F</b>       | <b>1,230.3</b> | <b>F</b>       | <b>620.4</b>    |

|                                             |          |              |          |              |
|---------------------------------------------|----------|--------------|----------|--------------|
| eastbound right turn                        | E        | 40.4         | C        | 21.0         |
| 8. Dawsonville Highway at McEver Road       | D        | 52.3         | <b>F</b> | <b>154.3</b> |
| northbound approach (GA 53)                 | E        | 75.8         | <b>F</b> | <b>163.8</b> |
| southbound approach (GA 53)                 | C        | 22.2         | E        | 60.3         |
| eastbound approach                          | <b>F</b> | <b>111.2</b> | <b>F</b> | <b>270.3</b> |
| westbound approach                          | E        | 60.9         | E        | 78.5         |
| 9. Dawsonville Highway at Green Hill Circle | B        | 15.0         | E        | 68.5         |
| northbound approach (GA 53)                 | A        | 8.7          | E        | 73.0         |
| southbound approach (GA 53)                 | B        | 14.4         | E        | 59.3         |
| eastbound approach                          | D        | 47.4         | E        | 59.8         |
| westbound approach                          | D        | 38.8         | <b>F</b> | <b>119.2</b> |
| 10. Dawsonville Highway at Shallowford Road | B        | 13.5         | <b>F</b> | <b>83.2</b>  |
| northbound approach (GA 53)                 | A        | 6.4          | E        | 75.2         |
| southbound approach (GA 53)                 | B        | 10.4         | E        | 76.1         |
| eastbound approach                          | E        | 76.4         | <b>F</b> | <b>127.7</b> |
| westbound approach                          | D        | 49.9         | E        | 77.7         |

The outparcels' trips will generally be added to the major through movements at each study intersection, and will increase overall intersection delays at each location. The most significant impact of the outparcels will be incurred at the Canterbury intersection, which will serve as the primary access point to GA 53 for all of the outparcels. The operational analysis at this intersection shows that the overall intersection will deteriorate to LOS F in the p.m. and the side street left turns will experience extremely high delays. Because many of the new side street trips exiting the outparcels will be left turners, this intersection becomes a more likely candidate for signalization in the Future Phase Two condition. It is recommended that a signal warrant analysis be performed for this location in the future when the outparcels are planned to be developed. The Georgia DOT right turn lane analysis provided in the next section of this report indicates that a northbound right turn lane on GA 53 at this site access will be necessary in the Future Phase Two condition, when the outparcels are developed and operational.

## Georgia DOT Auxiliary Turn Lane Standards

The four primary site connection points to GA 53 will occur at Sportsman Club Road, across from Avonlea Way, across from Canterbury Road, and via Ahaluna Drive. All four locations are served by existing median breaks and southbound exclusive left turn lanes are already provided, which will serve the site entering left turn traffic, at each location. However, there are no northbound exclusive right turn lanes, which would serve site entering right turn traffic, at any of these locations. The standards proscribed in the Georgia DOT's *Regulations for Driveway and Encroachment Control* (Driveway Manual), revision 4.0, dated 3/15/2016, were reviewed for the requirements for right turn lanes. Table 10, below, is Table 4-6 from the Driveway Manual, and proscribes the right turn volume thresholds at which exclusive right turn lanes must be provided.

**Table 10 – Georgia DOT Minimum Volume Requirements for Right Turn Lanes**

| Posted Speed   | 2 Lane Routes |               | More than 2 Lanes on Main Road |               |
|----------------|---------------|---------------|--------------------------------|---------------|
|                | AADT          |               | AADT                           |               |
|                | < 6000        | >=6000        | <10000                         | >=10000       |
| 35 MPH or Less | 200 RTV a day | 100 RTV a day | 200 RTV a day                  | 100 RTV a day |
| 40 to 50 MPH   | 150 RTV a day | 75 RTV a day  | 150 RTV a day                  | 75 RTV a day  |
| 55 to 60 MPH   | 100 RTV a day | 50 RTV a day  | 100 RTV a day                  | 50 RTV a day  |
| >= 65 MPH      | Always        | Always        | Always                         | Always        |

**Table 4-6 Minimum Volumes Requiring Right Turn Lanes**

The AADT on GA 53 near Sportsman Club Road was identified previously in Table 2 in this report as 25,600 vpd in 2015, and the posted speed limit is 45 mph. For main roads with these conditions, a right turn lane must be provided when the right turn volume exceeds 75 right turn vehicles (RTV) per day. This study calculated a.m. and p.m. peak hour right turn volumes. As a general rule of thumb, p.m. peak hour volumes are typically about 10% of 24-hour volumes. However, field observations suggest that the off-peak activity turning into and out of these intersections currently is very low, so it is uncertain if the 10% rule of thumb is applicable. Using the a.m. and p.m. volume projections, and the 10% rule of thumb to estimate 24-hour RTVs, the existing, no-build, Future Phase One, and Future Phase Two volumes were tested against the Georgia DOT right turn lane standard at the four primary site access locations on GA 53. This analysis is summarized in Table 11.

**Table 11 – Georgia DOT Right Turn Lane Standards for Northbound GA 53**

| Intersection<br>GA 53 at: | 24-Hour<br>RTV<br>Threshold | Existing |      |       | No-Build |      |       | Future Phase One |      |       | Future Phase Two |      |       |
|---------------------------|-----------------------------|----------|------|-------|----------|------|-------|------------------|------|-------|------------------|------|-------|
|                           |                             | a.m.     | p.m. | 24-hr | a.m.     | p.m. | 24-hr | a.m.             | p.m. | 24-hr | a.m.             | p.m. | 24-hr |
| Sportsman                 | 75                          | 8        | 19   | 190   | 9        | 21   | 210   | 15               | 34   | 340   | 15               | 34   | 340   |
| Avonlea                   | 75                          | 0        | 0    | 0     | 0        | 0    | 0     | 2                | 17   | 170   | 2                | 17   | 170   |
| Canterbury                | 75                          | 0        | 0    | 0     | 0        | 0    | 0     | 3                | 4    | 40    | 40               | 128  | 1,280 |
| Ahaluna                   | 75                          | 11       | 38   | 380   | 12       | 42   | 420   | 47               | 114  | 1,140 | 47               | 114  | 1,140 |

The results in Table 11 indicate that a northbound right turn lane is possibly justified in the existing condition on GA 53 at Sportsman Club Road and almost certainly justified on GA 53 at Ahaluna Drive. The increase in volumes to the no-build condition will increase the justification for these right turn lanes. The Lanier Tract will add trips to each intersection and create the fourth approaches at the median breaks at Avonlea Way and Canterbury Road. Table 10 suggests that a northbound right turn lane is likely to be justified at the Avonlea Way access but not at the Canterbury access with the development of the Lanier Tract. With the development of the retail outparcels in Future Phase Two, a northbound right turn lane is also expected to be justified at the Canterbury access.

Table 12, below, is Table 4-8 from the Driveway Manual, and presents the Georgia DOT right turn lane design standards. Based on the posted 45 mph speed limit, each northbound right turn lane on GA 53 should include 175 feet of full-width storage and a 100 foot taper.

**Table 12 – Georgia DOT Design Standards for Right Turn Lanes**

| Speed, mph | Full Width Storage, ft. | Taper, ft. |
|------------|-------------------------|------------|
| 25         |                         | 50         |
| 30         | 75                      | 50         |
| 35         | 100                     | 50         |
| 40         | 150                     | 50         |
| 45         | 175                     | 100        |
| 50         | 225                     | 100        |
| 55         | 250                     | 100        |
| 60         | 300                     | 100        |
| 65         | 350                     | 100        |

**Table 4-8 Minimum Right Turn Deceleration Lengths**

The site plan also anticipates providing two right-in / right-out RIRO accesses to the office / retail tract and the plan anticipates providing deceleration lanes on GA 53 at both of these accesses. It is recommended that these anticipated deceleration lanes also be constructed to satisfy the Driveway Manual standards.

The project site engineer is referred to the Georgia DOT Driveway Manual for other driveway design standards including driveway width, island design, and curb return radii.

## Summary of Study Findings and Recommendations

The following is a summary of the findings and the recommendations of this traffic impact study at each intersection:

1. **Sportsman Club Road at Strickland Drive** – No changes are recommended at this intersection for the existing, no-build, or Future Phase One and Future Phase Two conditions.
2. **Dawsonville Highway at Sportsman Club Road** – The side street delays at this intersection are significant now and will increase in the future. While a warrant analysis was not performed as part of this traffic impact study, the low side street volumes make the intersection an unlikely candidate for signalization. The potential for justifying signalization will increase in the future, but side street volumes will continue to remain moderate. This study also identifies the need for a northbound exclusive right turn lane to be added on GA 53 at Sportsman Club Road. Northbound and southbound exclusive left turn lanes are currently provided at this median break.
3. **Dawsonville Highway at Avonlea Way** – Side street delays are high at the existing eastbound approach of Avonlea Way, and these delays will increase in the no-build and future conditions. The side street volumes are predominately right turners, with extremely low left turn volumes. The Lanier Tract will introduce a new fourth leg at the Avonlea Way intersection (there is an existing private residential driveway at this median break, which would be replaced by the Lanier Tract access). Northbound and southbound exclusive left turn lanes are currently provided at this median break. The volumes exiting the new Lanier Tract access will be low and many of them will be right turners. Therefore, this intersection is considered unlikely to be a candidate for signalization in the existing, no-build, and Future Phases One and Two, even with the addition of the Lanier Tract trips. The Georgia DOT right turn lane analysis suggests that a northbound exclusive right turn lane should be considered at this access and the site plan includes the addition of this lane. The new site access should be constructed with one entering lane and one exiting lane. The side street approach exiting the site should be controlled by side street stop sign and accompanying stop bar.
4. **Dawsonville Highway at Canterbury Road** – Side street delays are high on the existing eastbound approach of Canterbury Road and these delays will increase in the no-build and future conditions. As with Avonlea Way, the side street volumes at this intersection are predominately right turners, with extremely low left turn volumes. For this reason, this intersection is considered an unlikely candidate for signalization in the existing, no-build, and Future Phase One conditions. The outparcel access will align with Canterbury Road and the Lanier Tract will connect through the outparcels to GA 53 at this location. Northbound and southbound exclusive left turn lanes are currently provided at this median break. A short southbound deceleration lane is provided on GA 53 at Canterbury Road, though this lane does not appear to have been constructed to current Georgia DOT design standards. The northbound right turn volume will be low in the Future Phase One condition, and the Georgia DOT right turn lane analysis indicates that no decel lane will be required for Future Phase One. However, with the future development of the retail outparcels, by others, the right turn volumes will be significant, primarily due to the outparcels, and a northbound deceleration lane is recommended for this location. The Future Phase Two side street volumes exiting the outparcels will



be notable and this intersection will likely be a prime candidate for signalization upon development of the outparcels. It is recommended that at such time as the outparcels are planned to be developed, a signal warrant study be performed for this intersection according to the standards set forth in the Federal Highway Administration's *Manual On Uniform Traffic Control Devices* (MUTCD). This new access at the Canterbury Road median break should be constructed with at least one entering lane and an exiting shared left/through lane and an exclusive right turn lane. The two westbound lanes are in anticipation of the development of the outparcels. With only the Lanier Tract volumes, only one entering and one exiting lane would be required. Until signalization is warranted, the side street approach exiting the outparcel tracts should be controlled by side street stop sign and accompanying stop bar.

5. **Dawsonville Highway at Ahaluna Drive** – The review of Georgia DOT auxiliary lane standards indicates that a northbound right turn lane should be added on GA 53 at Ahaluna Drive in the existing condition. The future volumes exiting Ahaluna Drive would benefit from the addition of a second westbound lane, resulting in a shared left/through lane and an exclusive right turn lane on Ahaluna Drive at GA 53. This second lane would reduce the demand for side street greentime on the signal and improve side street levels of service. It was noted that the need for relocation of the signal steel strain pole, a drainage structure, and possibly a large brick monument sign, may reduce the feasibility of adding this second westbound lane. With the addition of Lanier Tract southbound left turns from GA 53, consideration should be given to adding a protected / permissive southbound left turn phase, which would match the existing protected / permissive phasing for the northbound left turn. The Georgia DOT left turn phase warrants are not satisfied for this southbound left turn based on volume projections alone. However, other factors such as high speeds on GA 53 and the senior residents expected to reside at the Lanier Tract, merit consideration. Field observations suggest that there may be an opportunity to shorten the cycle length, which would reduce time spent by vehicles waiting on the side street.
6. **Dawsonville Highway at North Lake Square Access** – This intersection operates acceptably in all analysis conditions. The side street approaches do incur some delays at all times, primarily due to the long cycle length on the signal, which allocates most of the greentime, appropriately, to GA 53. The side street delays are incurred by minimal volumes in the a.m., since the retail served by the side streets are generally not operational at that time. Higher volumes incur the side street delays in the p.m., when the retail is operational. However, overall this intersection operates appropriately and no mitigation is recommended for any analysis condition.
7. **Dawsonville Highway at Beachwood Boulevard** At the GA 53 / Beechwood Boulevard intersection, it is noted that a fourth leg is currently stubbed-out across from Beechwood Boulevard and a retail development is under construction on that site. Auxiliary left and right turn lanes are provided on GA 53 serving Beechwood Boulevard and the future fourth leg appears to be designed for right-in / right-out access only, with a northbound deceleration lane provided on GA 53. No changes are recommended at this intersection based on this study.
8. **Dawsonville Highway at McEver Road** – The lane configuration and signal phasing at this intersection are generally appropriate. The existing southbound right turn volume is sufficiently-high (828 a.m., 481 p.m.) to

merit consideration of the addition of a second exclusive right turn lane and/or the addition of a protected right turn overlap phase. The justification for adding this phasing and/or second right turn lane will increase as volumes increase. Finally, there may be an opportunity to reduce the cycle length and fine-tune the signal timing at this intersection.

9. **Dawsonville Highway at Green Hill Circle** – This signalized intersection incurs high sides street delays, again, due to the allocation of the majority of greentime to the Dawsonville Highway approaches. There may be an opportunity to reduce the cycle length and fine-tune the signal timing at this intersection.
10. **Dawsonville Highway at Shallowford Road** – The lane configuration and signal phasing are appropriate for this intersection. Reduction of the cycle length and optimization of the allocation of greentime could reduce delays and queuing at this intersection.

## Appendix A

### Traffic Count Data and Volume Worksheets

**Lanier Tract Multi-Use DRI Traffic Impact Study**  
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**Intersection 1: Sportsman Club Road at Strickland Drive**

| Weekday A.M. Peak Hour                               | Northbound Sportsman Club Road |       |     | Southbound Sportsman Club Road |       |     | Westbound Strickland Drive |       |     |
|------------------------------------------------------|--------------------------------|-------|-----|--------------------------------|-------|-----|----------------------------|-------|-----|
|                                                      | T                              | R     | Tot | L                              | T     | Tot | L                          | R     | Tot |
| <b>Counted Volumes (Thursday, November 17, 2016)</b> | 6                              | 1     | 7   | 0                              | 23    | 23  | 10                         | 0     | 10  |
| Annual Background Growth                             | 10.4%                          | 10.4% |     | 10.4%                          | 10.4% |     | 10.4%                      | 10.4% |     |
| <b>No-Build Volumes</b>                              | 7                              | 1     | 8   | 0                              | 25    | 25  | 11                         | 0     | 11  |
| <b>Willow Springs Townhomes</b>                      | 0                              | 6     | 6   | 0                              | 0     | 0   | 12                         | 0     | 12  |
| Lanier Tract Senior Living Residential New Trips     | 0                              | 4     | 4   | 0                              | 0     | 0   | 7                          | 0     | 7   |
| Lanier Tract Office/Retail New Trips                 | 0                              | 0     | 0   | 0                              | 0     | 0   | 0                          | 0     | 0   |
| <b>Total Lanier Tract Site Trips</b>                 | 0                              | 4     | 4   | 0                              | 0     | 0   | 7                          | 0     | 7   |
| <b>Phase 1 Future Volumes</b>                        | 7                              | 11    | 18  | 0                              | 25    | 25  | 30                         | 0     | 30  |
| Retail Outparcels                                    | 0                              | 0     | 0   | 0                              | 0     | 0   | 0                          | 0     | 0   |
| <b>Phase 2 Future Volumes</b>                        | 7                              | 11    | 18  | 0                              | 25    | 25  | 30                         | 0     | 30  |

| Weekday P.M. Peak Hour                                | Northbound Sportsman Club Road |       |     | Southbound Sportsman Club Road |       |     | Westbound Strickland Drive |       |     |
|-------------------------------------------------------|--------------------------------|-------|-----|--------------------------------|-------|-----|----------------------------|-------|-----|
|                                                       | T                              | R     | Tot | L                              | T     | Tot | L                          | R     | Tot |
| <b>Counted Volumes (Thursday, September 17, 2015)</b> | 29                             | 9     | 38  | 0                              | 23    | 23  | 7                          | 0     | 7   |
| Annual Background Growth                              | 10.4%                          | 10.4% |     | 10.4%                          | 10.4% |     | 10.4%                      | 10.4% |     |
| <b>No-Build Volumes</b>                               | 32                             | 10    | 42  | 0                              | 25    | 25  | 8                          | 0     | 8   |
| <b>Willow Springs Townhomes</b>                       | 0                              | 12    | 12  | 0                              | 0     | 0   | 11                         | 0     | 11  |
| Lanier Tract Senior Living Residential New Trips      | 0                              | 6     | 6   | 0                              | 0     | 0   | 5                          | 0     | 5   |
| Lanier Tract Office/Retail New Trips                  | 0                              | 0     | 0   | 0                              | 0     | 0   | 0                          | 0     | 0   |
| <b>Total Lanier Tract Site Trips</b>                  | 0                              | 6     | 6   | 0                              | 0     | 0   | 5                          | 0     | 5   |
| <b>Phase 1 Future Volumes</b>                         | 32                             | 28    | 60  | 0                              | 25    | 25  | 24                         | 0     | 24  |
| Retail Outparcels                                     | 0                              | 0     | 0   | 0                              | 0     | 0   | 0                          | 0     | 0   |
| <b>Phase 2 Future Volumes</b>                         | 32                             | 28    | 60  | 0                              | 25    | 25  | 24                         | 0     | 24  |

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**Intersection 2: Georgia State Route 53 at Sportsman Club Road**

| Weekday A.M. Peak Hour                               | Northbound GA 53 |       |       |     | Southbound GA 53 |       |       |      | Eastbound turn lane |       |       |     | Westbound Sportsman Club Road |       |       |     |
|------------------------------------------------------|------------------|-------|-------|-----|------------------|-------|-------|------|---------------------|-------|-------|-----|-------------------------------|-------|-------|-----|
|                                                      | L                | T     | R     | Tot | L                | T     | R     | Tot  | L                   | T     | R     | Tot | L                             | T     | R     | Tot |
| <b>Counted Volumes (Thursday, November 17, 2016)</b> | 0                | 743   | 8     | 751 | 9                | 1687  | 0     | 1696 | 0                   | 0     | 0     | 0   | 25                            | 0     | 15    | 40  |
| Annual Background Growth                             | 10.4%            | 10.4% | 10.4% |     | 10.4%            | 10.4% | 10.4% |      | 10.4%               | 10.4% | 10.4% |     | 10.4%                         | 10.4% | 10.4% |     |
| <b>No-Build Volumes</b>                              | 0                | 820   | 9     | 829 | 10               | 1863  | 0     | 1873 | 0                   | 0     | 0     | 0   | 28                            | 0     | 17    | 44  |
| <b>Willow Springs Townhomes</b>                      | 0                | 0     | 4     | 4   | 2                | 0     | 0     | 2    | 0                   | 0     | 0     | 0   | 9                             | 0     | 3     | 12  |
| Lanier Tract Senior Living Residential New Trips     | 0                | 19    | 2     | 21  | 2                | 15    | 0     | 17   | 0                   | 0     | 0     | 0   | 4                             | 0     | 3     | 7   |
| Lanier Tract Office/Retail New Trips                 | 5                | 2     | 0     | 7   | 0                | 7     | 0     | 7    | 0                   | 0     | 0     | 0   | 0                             | 0     | 0     | 0   |
| <b>Total Lanier Tract Site Trips</b>                 | 5                | 21    | 2     | 28  | 2                | 22    | 0     | 24   | 0                   | 0     | 0     | 0   | 4                             | 0     | 3     | 7   |
| <b>Phase 1 Future Volumes</b>                        | 5                | 841   | 15    | 861 | 14               | 1885  | 0     | 1899 | 0                   | 0     | 0     | 0   | 41                            | 0     | 23    | 63  |
| Retail Outparcels                                    | 0                | 9     | 0     | 9   | 0                | 14    | 0     | 14   | 0                   | 0     | 0     | 0   | 0                             | 0     | 0     | 0   |
| <b>Phase 2 Future Volumes</b>                        | 5                | 850   | 15    | 870 | 14               | 1899  | 0     | 1913 | 0                   | 0     | 0     | 0   | 41                            | 0     | 23    | 63  |

| Weekday P.M. Peak Hour                                | Northbound GA 53 |       |       |      | Southbound GA 53 |       |       |      | Eastbound turn lane |       |       |     | Westbound Sportsman Club Road |       |       |     |
|-------------------------------------------------------|------------------|-------|-------|------|------------------|-------|-------|------|---------------------|-------|-------|-----|-------------------------------|-------|-------|-----|
|                                                       | L                | T     | R     | Tot  | L                | T     | R     | Tot  | L                   | T     | R     | Tot | L                             | T     | R     | Tot |
| <b>Counted Volumes (Thursday, September 17, 2015)</b> | 2                | 1671  | 19    | 1692 | 15               | 1039  | 0     | 1054 | 0                   | 0     | 0     | 0   | 28                            | 0     | 9     | 37  |
| Annual Background Growth                              | 10.4%            | 10.4% | 10.4% |      | 10.4%            | 10.4% | 10.4% |      | 10.4%               | 10.4% | 10.4% |     | 10.4%                         | 10.4% | 10.4% |     |
| <b>No-Build Volumes</b>                               | 2                | 1845  | 21    | 1868 | 17               | 1147  | 0     | 1164 | 0                   | 0     | 0     | 0   | 31                            | 0     | 10    | 41  |
| <b>Willow Springs Townhomes</b>                       | 0                | 0     | 9     | 9    | 3                | 0     | 0     | 3    | 0                   | 0     | 0     | 0   | 8                             | 0     | 3     | 11  |
| Lanier Tract Senior Living Residential New Trips      | 0                | 21    | 4     | 25   | 2                | 14    | 0     | 16   | 0                   | 0     | 0     | 0   | 3                             | 0     | 2     | 5   |
| Lanier Tract Office/Retail New Trips                  | 24               | 10    | 0     | 34   | 0                | 5     | 0     | 5    | 0                   | 0     | 0     | 0   | 0                             | 0     | 0     | 0   |
| <b>Total Lanier Tract Site Trips</b>                  | 24               | 31    | 4     | 59   | 2                | 19    | 0     | 21   | 0                   | 0     | 0     | 0   | 3                             | 0     | 2     | 5   |
| <b>Phase 1 Future Volumes</b>                         | 26               | 1876  | 34    | 1936 | 22               | 1166  | 0     | 1188 | 0                   | 0     | 0     | 0   | 42                            | 0     | 15    | 57  |
| Retail Outparcels                                     | 0                | 38    | 0     | 38   | 0                | 35    | 0     | 35   | 0                   | 0     | 0     | 0   | 0                             | 0     | 0     | 0   |
| <b>Phase 2 Future Volumes</b>                         | 26               | 1914  | 34    | 1974 | 22               | 1201  | 0     | 1223 | 0                   | 0     | 0     | 0   | 42                            | 0     | 15    | 57  |

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**Intersection 3: Georgia State Route 53 at Avonlea Way**

| Weekday A.M. Peak Hour                               | Northbound GA 53 |            |          |            | Southbound GA 53 |             |          |             | Eastbound Avonlea Way |          |           |           | Westbound Lanier Tract Access |          |           |           |
|------------------------------------------------------|------------------|------------|----------|------------|------------------|-------------|----------|-------------|-----------------------|----------|-----------|-----------|-------------------------------|----------|-----------|-----------|
|                                                      | L                | T          | R        | Tot        | L                | T           | R        | Tot         | L                     | T        | R         | Tot       | L                             | T        | R         | Tot       |
| <b>Counted Volumes (Thursday, November 17, 2016)</b> | 12               | 757        | 1        | 770        | 0                | 1668        | 6        | 1674        | 15                    | 0        | 72        | 87        | 0                             | 0        | 0         | 0         |
| Annual Background Growth                             | 10.4%            | 10.4%      | 10.4%    |            | 10.4%            | 10.4%       | 10.4%    |             | 10.4%                 | 10.4%    | 10.4%     |           | 10.4%                         | 10.4%    | 10.4%     |           |
| <b>No-Build Volumes</b>                              | <b>13</b>        | <b>836</b> | <b>1</b> | <b>850</b> | <b>0</b>         | <b>1842</b> | <b>7</b> | <b>1848</b> | <b>17</b>             | <b>0</b> | <b>79</b> | <b>96</b> | <b>0</b>                      | <b>0</b> | <b>0</b>  | <b>0</b>  |
| <b>Willow Springs Townhomes</b>                      | <b>0</b>         | <b>4</b>   | <b>0</b> | <b>4</b>   | <b>0</b>         | <b>9</b>    | <b>0</b> | <b>9</b>    | <b>0</b>              | <b>0</b> | <b>0</b>  | <b>0</b>  | <b>0</b>                      | <b>0</b> | <b>0</b>  | <b>0</b>  |
| Lanier Tract Senior Living Residential New Trips     | 0                | 9          | 1        | 10         | 8                | 11          | 0        | 19          | 0                     | 0        | 0         | 0         | 2                             | 0        | 13        | 15        |
| Lanier Tract Office/Retail New Trips                 | 0                | 17         | 0        | 17         | 7                | 5           | 0        | 12          | 0                     | 0        | 0         | 0         | 0                             | 0        | 0         | 0         |
| <b>Total Lanier Tract Site Trips</b>                 | <b>0</b>         | <b>26</b>  | <b>1</b> | <b>27</b>  | <b>15</b>        | <b>16</b>   | <b>0</b> | <b>31</b>   | <b>0</b>              | <b>0</b> | <b>0</b>  | <b>0</b>  | <b>2</b>                      | <b>0</b> | <b>13</b> | <b>15</b> |
| <b>Phase 1 Future Volumes</b>                        | <b>13</b>        | <b>866</b> | <b>2</b> | <b>881</b> | <b>15</b>        | <b>1867</b> | <b>7</b> | <b>1888</b> | <b>17</b>             | <b>0</b> | <b>79</b> | <b>96</b> | <b>2</b>                      | <b>0</b> | <b>13</b> | <b>15</b> |
| Retail Outparcels                                    | 0                | 9          | 0        | 9          | 0                | 14          | 0        | 14          | 0                     | 0        | 0         | 0         | 0                             | 0        | 0         | 0         |
| <b>Phase 2 Future Volumes</b>                        | <b>13</b>        | <b>875</b> | <b>2</b> | <b>890</b> | <b>15</b>        | <b>1881</b> | <b>7</b> | <b>1902</b> | <b>17</b>             | <b>0</b> | <b>79</b> | <b>96</b> | <b>2</b>                      | <b>0</b> | <b>13</b> | <b>15</b> |

| Weekday P.M. Peak Hour                                | Northbound GA 53 |             |           |             | Southbound GA 53 |             |           |             | Eastbound Avonlea Way |          |           |           | Westbound Lanier Tract Access |          |           |           |
|-------------------------------------------------------|------------------|-------------|-----------|-------------|------------------|-------------|-----------|-------------|-----------------------|----------|-----------|-----------|-------------------------------|----------|-----------|-----------|
|                                                       | L                | T           | R         | Tot         | L                | T           | R         | Tot         | L                     | T        | R         | Tot       | L                             | T        | R         | Tot       |
| <b>Counted Volumes (Thursday, September 17, 2015)</b> | 62               | 1650        | 0         | 1712        | 2                | 1102        | 14        | 1118        | 11                    | 0        | 47        | 58        | 0                             | 0        | 0         | 0         |
| Annual Background Growth                              | 10.4%            | 10.4%       | 10.4%     |             | 10.4%            | 10.4%       | 10.4%     |             | 10.4%                 | 10.4%    | 10.4%     |           | 10.4%                         | 10.4%    | 10.4%     |           |
| <b>No-Build Volumes</b>                               | <b>68</b>        | <b>1822</b> | <b>0</b>  | <b>1890</b> | <b>2</b>         | <b>1217</b> | <b>15</b> | <b>1234</b> | <b>12</b>             | <b>0</b> | <b>52</b> | <b>64</b> | <b>0</b>                      | <b>0</b> | <b>0</b>  | <b>0</b>  |
| <b>Willow Springs Townhomes</b>                       | <b>0</b>         | <b>9</b>    | <b>0</b>  | <b>9</b>    | <b>0</b>         | <b>8</b>    | <b>0</b>  | <b>8</b>    | <b>0</b>              | <b>0</b> | <b>0</b>  | <b>0</b>  | <b>0</b>                      | <b>0</b> | <b>0</b>  | <b>0</b>  |
| Lanier Tract Senior Living Residential New Trips      | 0                | 14          | 17        | 31          | 3                | 14          | 0         | 17          | 0                     | 0        | 0         | 0         | 2                             | 0        | 11        | 13        |
| Lanier Tract Office/Retail New Trips                  | 0                | 13          | 0         | 13          | 5                | 24          | 0         | 29          | 0                     | 0        | 0         | 0         | 0                             | 0        | 0         | 0         |
| <b>Total Lanier Tract Site Trips</b>                  | <b>0</b>         | <b>27</b>   | <b>17</b> | <b>44</b>   | <b>8</b>         | <b>38</b>   | <b>0</b>  | <b>46</b>   | <b>0</b>              | <b>0</b> | <b>0</b>  | <b>0</b>  | <b>2</b>                      | <b>0</b> | <b>11</b> | <b>13</b> |
| <b>Phase 1 Future Volumes</b>                         | <b>68</b>        | <b>1858</b> | <b>17</b> | <b>1943</b> | <b>10</b>        | <b>1263</b> | <b>15</b> | <b>1288</b> | <b>12</b>             | <b>0</b> | <b>52</b> | <b>64</b> | <b>2</b>                      | <b>0</b> | <b>11</b> | <b>13</b> |
| Retail Outparcels                                     | 0                | 38          | 0         | 38          | 0                | 35          | 0         | 35          | 0                     | 0        | 0         | 0         | 0                             | 0        | 0         | 0         |
| <b>Phase 2 Future Volumes</b>                         | <b>68</b>        | <b>1896</b> | <b>17</b> | <b>1981</b> | <b>10</b>        | <b>1298</b> | <b>15</b> | <b>1323</b> | <b>12</b>             | <b>0</b> | <b>52</b> | <b>64</b> | <b>2</b>                      | <b>0</b> | <b>11</b> | <b>13</b> |

**MARC R. ACAMPORA, PE, LLC**

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## Intersection 4: Georgia State Route 53 at Canterbury Road

| Weekday A.M. Peak Hour                           | Northbound GA 53 |       |    |     | Southbound GA 53 |       |       |      | Eastbound Canterbury Road |   |       |     | Westbound Lanier Tract Access |   |    |     |
|--------------------------------------------------|------------------|-------|----|-----|------------------|-------|-------|------|---------------------------|---|-------|-----|-------------------------------|---|----|-----|
|                                                  | L                | T     | R  | Tot | L                | T     | R     | Tot  | L                         | T | R     | Tot | L                             | T | R  | Tot |
| Counted Volumes (Thursday, November 17, 2016)    | 23               | 722   |    | 745 |                  | 1783  | 7     | 1790 | 18                        |   | 95    | 113 |                               |   |    |     |
| Annual Background Growth                         | 10.4%            | 10.4% |    |     |                  | 10.4% | 10.4% |      | 10.4%                     |   | 10.4% |     |                               |   |    |     |
| No-Build Volumes                                 | 25               | 797   |    | 823 |                  | 1969  | 8     | 1976 | 20                        |   | 105   | 125 |                               |   |    |     |
| Willow Springs Townhomes                         | 0                | 4     | 0  | 4   | 0                | 9     | 0     | 9    | 0                         | 0 | 0     | 0   | 0                             | 0 | 0  | 0   |
| Lanier Tract Senior Living Residential New Trips | 0                | 8     | 3  | 11  | 2                | 11    | 0     | 13   | 0                         | 0 | 0     | 0   | 3                             | 0 | 2  | 5   |
| Lanier Tract Office/Retail New Trips             | 0                | 17    | 0  | 17  | 0                | 5     | 0     | 5    | 0                         | 0 | 0     | 0   | 0                             | 0 | 0  | 0   |
| Total Lanier Tract Site Trips                    | 0                | 25    | 3  | 28  | 2                | 16    | 0     | 18   | 0                         | 0 | 0     | 0   | 3                             | 0 | 2  | 5   |
| Phase 1 Future Volumes                           | 25               | 826   | 3  | 855 | 2                | 1994  | 8     | 2003 | 20                        | 0 | 105   | 125 | 3                             | 0 | 2  | 5   |
| Retail Outparcels                                | 0                | 0     | 31 | 31  | 14               | 0     | 0     | 0    | 0                         | 0 | 0     | 0   | 18                            | 0 | 9  | 9   |
| Retail Outparcels Pass-by                        | 0                | -6    | 6  | 0   | 14               | -14   | 0     | -14  | 0                         | 0 | 0     | 0   | 8                             | 0 | 4  | 4   |
| Phase 2 Future Volumes                           | 25               | 820   | 40 | 886 | 30               | 1980  | 8     | 2017 | 20                        | 0 | 105   | 125 | 29                            | 0 | 15 | 44  |

| Weekday P.M. Peak Hour                           | Northbound GA 53 |       |     |      | Southbound GA 53 |       |       |      | Eastbound Canterbury Road |   |       |     | Westbound Lanier Tract Access |   |    |     |
|--------------------------------------------------|------------------|-------|-----|------|------------------|-------|-------|------|---------------------------|---|-------|-----|-------------------------------|---|----|-----|
|                                                  | L                | T     | R   | Tot  | L                | T     | R     | Tot  | L                         | T | R     | Tot | L                             | T | R  | Tot |
| Counted Volumes (Thursday, September 17, 2015)   | 111              | 1682  |     | 1793 |                  | 1108  | 14    | 1122 | 7                         |   | 28    | 35  |                               |   |    |     |
| Annual Background Growth                         | 10.4%            | 10.4% |     |      |                  | 10.4% | 10.4% |      | 10.4%                     |   | 10.4% |     |                               |   |    |     |
| No-Build Volumes                                 | 123              | 1857  |     | 1980 |                  | 1223  | 15    | 1239 | 8                         |   | 31    | 39  |                               |   |    |     |
| Willow Springs Townhomes                         | 0                | 9     | 0   | 9    | 0                | 8     | 0     | 8    | 0                         | 0 | 0     | 0   | 0                             | 0 | 0  | 0   |
| Lanier Tract Senior Living Residential New Trips | 0                | 29    | 4   | 33   | 3                | 13    | 0     | 16   | 0                         | 0 | 0     | 0   | 2                             | 0 | 2  | 4   |
| Lanier Tract Office/Retail New Trips             | 0                | 13    | 0   | 13   | 0                | 24    | 0     | 24   | 0                         | 0 | 0     | 0   | 0                             | 0 | 0  | 0   |
| Total Lanier Tract Site Trips                    | 0                | 42    | 4   | 46   | 3                | 37    | 0     | 40   | 0                         | 0 | 0     | 0   | 2                             | 0 | 2  | 4   |
| Phase 1 Future Volumes                           | 123              | 1908  | 4   | 2035 | 3                | 1268  | 15    | 1287 | 8                         | 0 | 31    | 39  | 2                             | 0 | 2  | 4   |
| Retail Outparcels                                | 0                | 0     | 76  | 76   | 35               | 0     | 0     | 0    | 0                         | 0 | 0     | 0   | 82                            | 0 | 38 | 38  |
| Retail Outparcels Pass-by                        | 0                | -48   | 48  | 0    | 30               | -30   | 0     | -30  | 0                         | 0 | 0     | 0   | 32                            | 0 | 52 | 52  |
| Phase 2 Future Volumes                           | 123              | 1860  | 128 | 2111 | 68               | 1238  | 15    | 1322 | 8                         | 0 | 31    | 39  | 116                           | 0 | 92 | 208 |

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City of Gainesville, Georgia

April 2017

**Intersection 5: Georgia State Route 53 at Lanier Valley Drive / Ahaluna Drive**

| <b>Weekday A.M. Peak Hour</b>                        | <b>Northbound GA 53</b> |            |           |            | <b>Southbound GA 53</b> |             |          |             | <b>Eastbound Lanier Valley Drive</b> |          |            |            | <b>Westbound Ahaluna Drive</b> |          |           |            |
|------------------------------------------------------|-------------------------|------------|-----------|------------|-------------------------|-------------|----------|-------------|--------------------------------------|----------|------------|------------|--------------------------------|----------|-----------|------------|
|                                                      | <b>L</b>                | <b>T</b>   | <b>R</b>  | <b>Tot</b> | <b>L</b>                | <b>T</b>    | <b>R</b> | <b>Tot</b>  | <b>L</b>                             | <b>T</b> | <b>R</b>   | <b>Tot</b> | <b>L</b>                       | <b>T</b> | <b>R</b>  | <b>Tot</b> |
| <b>Counted Volumes (Thursday, November 17, 2016)</b> | 55                      | 701        | 11        | 767        | 14                      | 1901        | 0        | 1915        | 19                                   | 5        | 115        | 139        | 37                             | 3        | 20        | 60         |
| Annual Background Growth                             | 10.4%                   | 10.4%      | 10.4%     |            | 10.4%                   | 10.4%       | 10.4%    |             | 10.4%                                | 10.4%    | 10.4%      |            | 10.4%                          | 10.4%    | 10.4%     |            |
| <b>No-Build Volumes</b>                              | <b>61</b>               | <b>774</b> | <b>12</b> | <b>847</b> | <b>15</b>               | <b>2099</b> | <b>0</b> | <b>2114</b> | <b>21</b>                            | <b>6</b> | <b>127</b> | <b>153</b> | <b>41</b>                      | <b>3</b> | <b>22</b> | <b>66</b>  |
| <b>Willow Springs Townhomes</b>                      | <b>0</b>                | <b>4</b>   | <b>0</b>  | <b>4</b>   | <b>0</b>                | <b>9</b>    | <b>0</b> | <b>9</b>    | <b>0</b>                             | <b>0</b> | <b>0</b>   | <b>0</b>   | <b>0</b>                       | <b>0</b> | <b>0</b>  | <b>0</b>   |
| Lanier Tract Senior Living Residential New Trips     | 0                       | 5          | 35        | 40         | 6                       | 8           | 0        | 14          | 0                                    | 0        | 0          | 0          | 51                             | 0        | 5         | 56         |
| Lanier Tract Office/Retail New Trips                 | 0                       | 17         | 0         | 17         | 0                       | 5           | 0        | 5           | 0                                    | 0        | 0          | 0          | 0                              | 0        | 0         | 0          |
| <b>Total Lanier Tract Site Trips</b>                 | <b>0</b>                | <b>22</b>  | <b>35</b> | <b>57</b>  | <b>6</b>                | <b>13</b>   | <b>0</b> | <b>19</b>   | <b>0</b>                             | <b>0</b> | <b>0</b>   | <b>0</b>   | <b>51</b>                      | <b>0</b> | <b>5</b>  | <b>56</b>  |
| <b>Phase 1 Future Volumes</b>                        | <b>61</b>               | <b>800</b> | <b>47</b> | <b>908</b> | <b>21</b>               | <b>2121</b> | <b>0</b> | <b>2142</b> | <b>21</b>                            | <b>6</b> | <b>127</b> | <b>153</b> | <b>92</b>                      | <b>3</b> | <b>27</b> | <b>122</b> |
| Retail Outparcels                                    | 0                       | 31         | 0         | 31         | 0                       | 18          | 0        | 18          | 0                                    | 0        | 0          | 0          | 0                              | 0        | 0         | 0          |
| <b>Phase 2 Future Volumes</b>                        | <b>61</b>               | <b>831</b> | <b>47</b> | <b>939</b> | <b>21</b>               | <b>2139</b> | <b>0</b> | <b>2160</b> | <b>21</b>                            | <b>6</b> | <b>127</b> | <b>153</b> | <b>92</b>                      | <b>3</b> | <b>27</b> | <b>122</b> |

| <b>Weekday P.M. Peak Hour</b>                         | <b>Northbound GA 53</b> |             |            |             | <b>Southbound GA 53</b> |             |          |             | <b>Eastbound Lanier Valley Drive</b> |          |            |            | <b>Westbound Ahaluna Drive</b> |          |           |            |
|-------------------------------------------------------|-------------------------|-------------|------------|-------------|-------------------------|-------------|----------|-------------|--------------------------------------|----------|------------|------------|--------------------------------|----------|-----------|------------|
|                                                       | <b>L</b>                | <b>T</b>    | <b>R</b>   | <b>Tot</b>  | <b>L</b>                | <b>T</b>    | <b>R</b> | <b>Tot</b>  | <b>L</b>                             | <b>T</b> | <b>R</b>   | <b>Tot</b> | <b>L</b>                       | <b>T</b> | <b>R</b>  | <b>Tot</b> |
| <b>Counted Volumes (Thursday, September 17, 2015)</b> | 179                     | 1737        | 38         | 1954        | 22                      | 1201        | 3        | 1226        | 21                                   | 1        | 96         | 118        | 37                             | 7        | 51        | 95         |
| Annual Background Growth                              | 10.4%                   | 10.4%       | 10.4%      |             | 10.4%                   | 10.4%       | 10.4%    |             | 10.4%                                | 10.4%    | 10.4%      |            | 10.4%                          | 10.4%    | 10.4%     |            |
| <b>No-Build Volumes</b>                               | <b>198</b>              | <b>1918</b> | <b>42</b>  | <b>2157</b> | <b>24</b>               | <b>1326</b> | <b>3</b> | <b>1354</b> | <b>23</b>                            | <b>1</b> | <b>106</b> | <b>130</b> | <b>41</b>                      | <b>8</b> | <b>56</b> | <b>105</b> |
| <b>Willow Springs Townhomes</b>                       | <b>0</b>                | <b>9</b>    | <b>0</b>   | <b>9</b>    | <b>0</b>                | <b>8</b>    | <b>0</b> | <b>8</b>    | <b>0</b>                             | <b>0</b> | <b>0</b>   | <b>0</b>   | <b>0</b>                       | <b>0</b> | <b>0</b>  | <b>0</b>   |
| Lanier Tract Senior Living Residential New Trips      | 0                       | 25          | 72         | 97          | 7                       | 8           | 0        | 15          | 0                                    | 0        | 0          | 0          | 57                             | 0        | 8         | 65         |
| Lanier Tract Office/Retail New Trips                  | 0                       | 13          | 0          | 13          | 0                       | 24          | 0        | 24          | 0                                    | 0        | 0          | 0          | 0                              | 0        | 0         | 0          |
| <b>Total Lanier Tract Site Trips</b>                  | <b>0</b>                | <b>38</b>   | <b>72</b>  | <b>110</b>  | <b>7</b>                | <b>32</b>   | <b>0</b> | <b>39</b>   | <b>0</b>                             | <b>0</b> | <b>0</b>   | <b>0</b>   | <b>57</b>                      | <b>0</b> | <b>8</b>  | <b>65</b>  |
| <b>Phase 1 Future Volumes</b>                         | <b>198</b>              | <b>1965</b> | <b>114</b> | <b>2276</b> | <b>31</b>               | <b>1366</b> | <b>3</b> | <b>1401</b> | <b>23</b>                            | <b>1</b> | <b>106</b> | <b>130</b> | <b>98</b>                      | <b>8</b> | <b>64</b> | <b>170</b> |
| Retail Outparcels                                     | 0                       | 76          | 0          | 76          | 0                       | 82          | 0        | 82          | 0                                    | 0        | 0          | 0          | 0                              | 0        | 0         | 0          |
| <b>Phase 2 Future Volumes</b>                         | <b>198</b>              | <b>2041</b> | <b>114</b> | <b>2352</b> | <b>31</b>               | <b>1448</b> | <b>3</b> | <b>1483</b> | <b>23</b>                            | <b>1</b> | <b>106</b> | <b>130</b> | <b>98</b>                      | <b>8</b> | <b>64</b> | <b>170</b> |

**MARC R. ACAMPORA, PE, LLC**

**Lanier Tract Multi-Use DRI Traffic Impact Study**  
City of Gainesville, Georgia

April 2017

**Intersection 6: Georgia State Route 53 at North Lake Square / Olive Garden Access**

| Weekday A.M. Peak Hour                             |                  |            |           |            |                  |             |          |             |                               |          |          |          |                             |          |          |          |
|----------------------------------------------------|------------------|------------|-----------|------------|------------------|-------------|----------|-------------|-------------------------------|----------|----------|----------|-----------------------------|----------|----------|----------|
|                                                    | Northbound GA 53 |            |           |            | Southbound GA 53 |             |          |             | Eastbound Olive Garden Access |          |          |          | Westbound North Lake Square |          |          |          |
|                                                    | L                | T          | R         | Tot        | L                | T           | R        | Tot         | L                             | T        | R        | Tot      | L                           | T        | R        | Tot      |
| <b>Counted Volumes (Wednesday, March 22, 2017)</b> | 11               | 740        | 9         | 760        | 5                | 1989        | 4        | 1998        | 2                             | 0        | 6        | 8        | 2                           | 0        | 0        | 2        |
| Annual Background Growth                           | 10.4%            | 10.4%      | 10.4%     |            | 10.4%            | 10.4%       | 10.4%    |             | 10.4%                         | 10.4%    | 10.4%    |          | 10.4%                       | 10.4%    | 10.4%    |          |
| <b>No-Build Volumes</b>                            | <b>12</b>        | <b>817</b> | <b>10</b> | <b>839</b> | <b>6</b>         | <b>2196</b> | <b>4</b> | <b>2206</b> | <b>2</b>                      | <b>0</b> | <b>7</b> | <b>9</b> | <b>2</b>                    | <b>0</b> | <b>0</b> | <b>2</b> |
| <b>Willow Springs Townhomes</b>                    | <b>0</b>         | <b>4</b>   | <b>0</b>  | <b>4</b>   | <b>0</b>         | <b>9</b>    | <b>0</b> | <b>9</b>    | <b>0</b>                      | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b>                    | <b>0</b> | <b>0</b> | <b>0</b> |
| Lanier Tract Senior Living Residential New Trips   | 0                | 40         | 0         | 40         | 0                | 59          | 0        | 59          | 0                             | 0        | 0        | 0        | 0                           | 0        | 0        | 0        |
| Lanier Tract Office/Retail New Trips               | 0                | 17         | 0         | 17         | 0                | 5           | 0        | 5           | 0                             | 0        | 0        | 0        | 0                           | 0        | 0        | 0        |
| <b>Total Lanier Tract Site Trips</b>               | <b>0</b>         | <b>57</b>  | <b>0</b>  | <b>57</b>  | <b>0</b>         | <b>64</b>   | <b>0</b> | <b>64</b>   | <b>0</b>                      | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b>                    | <b>0</b> | <b>0</b> | <b>0</b> |
| <b>Phase 1 Future Volumes</b>                      | <b>12</b>        | <b>878</b> | <b>10</b> | <b>900</b> | <b>6</b>         | <b>2269</b> | <b>4</b> | <b>2279</b> | <b>2</b>                      | <b>0</b> | <b>7</b> | <b>9</b> | <b>2</b>                    | <b>0</b> | <b>0</b> | <b>2</b> |
| Retail Outparcels                                  | 0                | 31         | 0         | 31         | 0                | 18          | 0        | 18          | 0                             | 0        | 0        | 0        | 0                           | 0        | 0        | 0        |
| <b>Phase 2 Future Volumes</b>                      | <b>12</b>        | <b>909</b> | <b>10</b> | <b>931</b> | <b>6</b>         | <b>2287</b> | <b>4</b> | <b>2297</b> | <b>2</b>                      | <b>0</b> | <b>7</b> | <b>9</b> | <b>2</b>                    | <b>0</b> | <b>0</b> | <b>2</b> |

| Weekday P.M. Peak Hour                             |                  |             |            |             |                  |             |           |             |                               |          |           |           |                             |          |           |            |
|----------------------------------------------------|------------------|-------------|------------|-------------|------------------|-------------|-----------|-------------|-------------------------------|----------|-----------|-----------|-----------------------------|----------|-----------|------------|
|                                                    | Northbound GA 53 |             |            |             | Southbound GA 53 |             |           |             | Eastbound Olive Garden Access |          |           |           | Westbound North Lake Square |          |           |            |
|                                                    | L                | T           | R          | Tot         | L                | T           | R         | Tot         | L                             | T        | R         | Tot       | L                           | T        | R         | Tot        |
| <b>Counted Volumes (Wednesday, March 22, 2017)</b> | 87               | 1763        | 138        | 1988        | 19               | 1199        | 27        | 1245        | 13                            | 3        | 60        | 76        | 118                         | 7        | 42        | 167        |
| Annual Background Growth                           | 10.4%            | 10.4%       | 10.4%      |             | 10.4%            | 10.4%       | 10.4%     |             | 10.4%                         | 10.4%    | 10.4%     |           | 10.4%                       | 10.4%    | 10.4%     |            |
| <b>No-Build Volumes</b>                            | <b>96</b>        | <b>1947</b> | <b>152</b> | <b>2195</b> | <b>21</b>        | <b>1324</b> | <b>30</b> | <b>1375</b> | <b>14</b>                     | <b>3</b> | <b>66</b> | <b>84</b> | <b>130</b>                  | <b>8</b> | <b>46</b> | <b>184</b> |
| <b>Willow Springs Townhomes</b>                    | <b>0</b>         | <b>9</b>    | <b>0</b>   | <b>9</b>    | <b>0</b>         | <b>8</b>    | <b>0</b>  | <b>8</b>    | <b>0</b>                      | <b>0</b> | <b>0</b>  | <b>0</b>  | <b>0</b>                    | <b>0</b> | <b>0</b>  | <b>0</b>   |
| Lanier Tract Senior Living Residential New Trips   | 0                | 97          | 0          | 97          | 0                | 65          | 0         | 65          | 0                             | 0        | 0         | 0         | 0                           | 0        | 0         | 0          |
| Lanier Tract Office/Retail New Trips               | 0                | 13          | 0          | 13          | 0                | 24          | 0         | 24          | 0                             | 0        | 0         | 0         | 0                           | 0        | 0         | 0          |
| <b>Total Lanier Tract Site Trips</b>               | <b>0</b>         | <b>110</b>  | <b>0</b>   | <b>110</b>  | <b>0</b>         | <b>89</b>   | <b>0</b>  | <b>89</b>   | <b>0</b>                      | <b>0</b> | <b>0</b>  | <b>0</b>  | <b>0</b>                    | <b>0</b> | <b>0</b>  | <b>0</b>   |
| <b>Phase 1 Future Volumes</b>                      | <b>96</b>        | <b>2066</b> | <b>152</b> | <b>2314</b> | <b>21</b>        | <b>1421</b> | <b>30</b> | <b>1472</b> | <b>14</b>                     | <b>3</b> | <b>66</b> | <b>84</b> | <b>130</b>                  | <b>8</b> | <b>46</b> | <b>184</b> |
| Retail Outparcels                                  | 0                | 76          | 0          | 76          | 0                | 82          | 0         | 82          | 0                             | 0        | 0         | 0         | 0                           | 0        | 0         | 0          |
| <b>Phase 2 Future Volumes</b>                      | <b>96</b>        | <b>2142</b> | <b>152</b> | <b>2390</b> | <b>21</b>        | <b>1503</b> | <b>30</b> | <b>1554</b> | <b>14</b>                     | <b>3</b> | <b>66</b> | <b>84</b> | <b>130</b>                  | <b>8</b> | <b>46</b> | <b>184</b> |

**MARC R. ACAMPORA, PE, LLC**

**Lanier Tract Multi-Use DRI Traffic Impact Study**  
City of Gainesville, Georgia

April 2017

**Intersection 7: Georgia State Route 53 at Beechwood Boulevard**

| Weekday A.M. Peak Hour                               | Northbound GA 53 |            |            | Southbound GA 53 |          |             | Eastbound Beechwood Boulevard |           |           |  |
|------------------------------------------------------|------------------|------------|------------|------------------|----------|-------------|-------------------------------|-----------|-----------|--|
|                                                      | L                | T          | Tot        | T                | R        | Tot         | L                             | R         | Tot       |  |
| <b>Counted Volumes (Thursday, November 17, 2016)</b> | 27               | 787        | 814        | 2006             | 2        | 2008        | 5                             | 41        | 46        |  |
| Annual Background Growth                             | 10.4%            | 10.4%      |            | 10.4%            | 10.4%    |             | 10.4%                         | 10.4%     |           |  |
| <b>No-Build Volumes</b>                              | <b>30</b>        | <b>869</b> | <b>899</b> | <b>2215</b>      | <b>2</b> | <b>2217</b> | <b>6</b>                      | <b>45</b> | <b>51</b> |  |
| <b>Willow Springs Townhomes</b>                      | <b>0</b>         | <b>4</b>   | <b>4</b>   | <b>9</b>         | <b>0</b> | <b>9</b>    | <b>0</b>                      | <b>0</b>  | <b>0</b>  |  |
| Lanier Tract Senior Living Residential New Trips     | 0                | 40         | 40         | 59               | 0        | 59          | 0                             | 0         | 0         |  |
| Lanier Tract Office/Retail New Trips                 | 0                | 17         | 17         | 5                | 0        | 5           | 0                             | 0         | 0         |  |
| <b>Total Lanier Tract Site Trips</b>                 | <b>0</b>         | <b>57</b>  | <b>57</b>  | <b>64</b>        | <b>0</b> | <b>64</b>   | <b>0</b>                      | <b>0</b>  | <b>0</b>  |  |
| <b>Phase 1 Future Volumes</b>                        | <b>30</b>        | <b>930</b> | <b>960</b> | <b>2288</b>      | <b>2</b> | <b>2290</b> | <b>6</b>                      | <b>45</b> | <b>51</b> |  |
| Retail Outparcels                                    | 0                | 31         | 31         | 18               | 0        | 18          | 0                             | 0         | 0         |  |
| <b>Phase 2 Future Volumes</b>                        | <b>30</b>        | <b>961</b> | <b>991</b> | <b>2306</b>      | <b>2</b> | <b>2308</b> | <b>6</b>                      | <b>45</b> | <b>51</b> |  |

| Weekday P.M. Peak Hour                                | Northbound GA 53 |             |             | Southbound GA 53 |           |             | Eastbound Beechwood Boulevard |           |           |  |
|-------------------------------------------------------|------------------|-------------|-------------|------------------|-----------|-------------|-------------------------------|-----------|-----------|--|
|                                                       | L                | T           | Tot         | T                | R         | Tot         | L                             | R         | Tot       |  |
| <b>Counted Volumes (Thursday, September 17, 2015)</b> | 86               | 1998        | 2084        | 1388             | 9         | 1397        | 1                             | 47        | 48        |  |
| Annual Background Growth                              | 10.4%            | 10.4%       |             | 10.4%            | 10.4%     |             | 10.4%                         | 10.4%     |           |  |
| <b>No-Build Volumes</b>                               | <b>95</b>        | <b>2206</b> | <b>2301</b> | <b>1532</b>      | <b>10</b> | <b>1542</b> | <b>1</b>                      | <b>52</b> | <b>53</b> |  |
| <b>Willow Springs Townhomes</b>                       | <b>0</b>         | <b>9</b>    | <b>9</b>    | <b>8</b>         | <b>0</b>  | <b>8</b>    | <b>0</b>                      | <b>0</b>  | <b>0</b>  |  |
| Lanier Tract Senior Living Residential New Trips      | 0                | 97          | 97          | 65               | 0         | 65          | 0                             | 0         | 0         |  |
| Lanier Tract Office/Retail New Trips                  | 0                | 13          | 13          | 24               | 0         | 24          | 0                             | 0         | 0         |  |
| <b>Total Lanier Tract Site Trips</b>                  | <b>0</b>         | <b>110</b>  | <b>110</b>  | <b>89</b>        | <b>0</b>  | <b>89</b>   | <b>0</b>                      | <b>0</b>  | <b>0</b>  |  |
| <b>Phase 1 Future Volumes</b>                         | <b>95</b>        | <b>2325</b> | <b>2420</b> | <b>1629</b>      | <b>10</b> | <b>1639</b> | <b>1</b>                      | <b>52</b> | <b>53</b> |  |
| Retail Outparcels                                     | 0                | 76          | 76          | 82               | 0         | 82          | 0                             | 0         | 0         |  |
| <b>Phase 2 Future Volumes</b>                         | <b>95</b>        | <b>2401</b> | <b>2496</b> | <b>1711</b>      | <b>10</b> | <b>1721</b> | <b>1</b>                      | <b>52</b> | <b>53</b> |  |

**MARC R. ACAMPORA, PE, LLC**

**Lanier Tract Multi-Use DRI Traffic Impact Study**  
City of Gainesville, Georgia

April 2017

**Intersection 8: Georgia State Route 53 - Dawsonville Highway at McEver Road / Commercial Access**

| Weekday A.M. Peak Hour                               | Northbound Dawsonville Highway |            |           |            | Southbound Dawsonville Highway |             |            |             | Eastbound McEver Road |           |            |            | Westbound Commercial Access |           |           |           |
|------------------------------------------------------|--------------------------------|------------|-----------|------------|--------------------------------|-------------|------------|-------------|-----------------------|-----------|------------|------------|-----------------------------|-----------|-----------|-----------|
|                                                      | L                              | T          | R         | Tot        | L                              | T           | R          | Tot         | L                     | T         | R          | Tot        | L                           | T         | R         | Tot       |
| <b>Counted Volumes (Thursday, November 17, 2016)</b> | 282                            | 465        | 55        | 802        | 28                             | 1170        | 828        | 2026        | 390                   | 28        | 342        | 760        | 42                          | 19        | 18        | 79        |
| Annual Background Growth                             | 10.4%                          | 10.4%      | 10.4%     |            | 10.4%                          | 10.4%       | 10.4%      |             | 10.4%                 | 10.4%     | 10.4%      |            | 10.4%                       | 10.4%     | 10.4%     |           |
| <b>No-Build Volumes</b>                              | <b>311</b>                     | <b>513</b> | <b>61</b> | <b>885</b> | <b>31</b>                      | <b>1292</b> | <b>914</b> | <b>2237</b> | <b>431</b>            | <b>31</b> | <b>378</b> | <b>839</b> | <b>46</b>                   | <b>21</b> | <b>20</b> | <b>87</b> |
| <b>Willow Springs Townhomes</b>                      | <b>0</b>                       | <b>3</b>   | <b>0</b>  | <b>3</b>   | <b>0</b>                       | <b>6</b>    | <b>3</b>   | <b>9</b>    | <b>1</b>              | <b>0</b>  | <b>0</b>   | <b>1</b>   | <b>0</b>                    | <b>0</b>  | <b>0</b>  | <b>0</b>  |
| Lanier Tract Senior Living Residential New Trips     | 0                              | 27         | 0         | 27         | 3                              | 40          | 16         | 59          | 11                    | 0         | 0          | 11         | 0                           | 0         | 2         | 2         |
| Lanier Tract Office/Retail New Trips                 | 0                              | 10         | 0         | 10         | 0                              | 3           | 2          | 5           | 7                     | 0         | 0          | 7          | 0                           | 0         | 0         | 0         |
| <b>Total Lanier Tract Site Trips</b>                 | <b>0</b>                       | <b>37</b>  | <b>0</b>  | <b>37</b>  | <b>3</b>                       | <b>43</b>   | <b>18</b>  | <b>64</b>   | <b>18</b>             | <b>0</b>  | <b>0</b>   | <b>18</b>  | <b>0</b>                    | <b>0</b>  | <b>2</b>  | <b>2</b>  |
| <b>Phase 1 Future Volumes</b>                        | <b>311</b>                     | <b>553</b> | <b>61</b> | <b>925</b> | <b>34</b>                      | <b>1341</b> | <b>935</b> | <b>2310</b> | <b>450</b>            | <b>31</b> | <b>378</b> | <b>858</b> | <b>46</b>                   | <b>21</b> | <b>22</b> | <b>89</b> |
| Retail Outparcels                                    | 0                              | 19         | 0         | 19         | 0                              | 11          | 7          | 18          | 12                    | 0         | 0          | 0          | 0                           | 0         | 0         | 0         |
| <b>Phase 2 Future Volumes</b>                        | <b>311</b>                     | <b>572</b> | <b>61</b> | <b>944</b> | <b>34</b>                      | <b>1352</b> | <b>942</b> | <b>2328</b> | <b>462</b>            | <b>31</b> | <b>378</b> | <b>870</b> | <b>46</b>                   | <b>21</b> | <b>22</b> | <b>89</b> |

| Weekday P.M. Peak Hour                                | Northbound Dawsonville Highway |             |           |             | Southbound Dawsonville Highway |             |            |             | Eastbound McEver Road |            |            |             | Westbound Commercial Access |            |           |            |
|-------------------------------------------------------|--------------------------------|-------------|-----------|-------------|--------------------------------|-------------|------------|-------------|-----------------------|------------|------------|-------------|-----------------------------|------------|-----------|------------|
|                                                       | L                              | T           | R         | Tot         | L                              | T           | R          | Tot         | L                     | T          | R          | Tot         | L                           | T          | R         | Tot        |
| <b>Counted Volumes (Thursday, September 17, 2015)</b> | 433                            | 1362        | 46        | 1841        | 62                             | 1029        | 481        | 1572        | 845                   | 213        | 386        | 1444        | 87                          | 91         | 81        | 259        |
| Annual Background Growth                              | 10.4%                          | 10.4%       | 10.4%     |             | 10.4%                          | 10.4%       | 10.4%      |             | 10.4%                 | 10.4%      | 10.4%      |             | 10.4%                       | 10.4%      | 10.4%     |            |
| <b>No-Build Volumes</b>                               | <b>478</b>                     | <b>1504</b> | <b>51</b> | <b>2033</b> | <b>68</b>                      | <b>1136</b> | <b>531</b> | <b>1736</b> | <b>933</b>            | <b>235</b> | <b>426</b> | <b>1594</b> | <b>96</b>                   | <b>100</b> | <b>89</b> | <b>286</b> |
| <b>Willow Springs Townhomes</b>                       | <b>0</b>                       | <b>6</b>    | <b>0</b>  | <b>6</b>    | <b>0</b>                       | <b>5</b>    | <b>3</b>   | <b>8</b>    | <b>3</b>              | <b>0</b>   | <b>0</b>   | <b>3</b>    | <b>0</b>                    | <b>0</b>   | <b>0</b>  | <b>0</b>   |
| Lanier Tract Senior Living Residential New Trips      | 0                              | 67          | 0         | 67          | 3                              | 44          | 18         | 65          | 26                    | 0          | 0          | 26          | 0                           | 0          | 4         | 4          |
| Lanier Tract Office/Retail New Trips                  | 0                              | 8           | 0         | 8           | 0                              | 14          | 10         | 24          | 5                     | 0          | 0          | 5           | 0                           | 0          | 0         | 0          |
| <b>Total Lanier Tract Site Trips</b>                  | <b>0</b>                       | <b>75</b>   | <b>0</b>  | <b>75</b>   | <b>3</b>                       | <b>58</b>   | <b>28</b>  | <b>89</b>   | <b>31</b>             | <b>0</b>   | <b>0</b>   | <b>31</b>   | <b>0</b>                    | <b>0</b>   | <b>4</b>  | <b>4</b>   |
| <b>Phase 1 Future Volumes</b>                         | <b>478</b>                     | <b>1585</b> | <b>51</b> | <b>2114</b> | <b>71</b>                      | <b>1199</b> | <b>562</b> | <b>1833</b> | <b>967</b>            | <b>235</b> | <b>426</b> | <b>1628</b> | <b>96</b>                   | <b>100</b> | <b>93</b> | <b>290</b> |
| Retail Outparcels                                     | 0                              | 47          | 0         | 47          | 0                              | 50          | 32         | 82          | 29                    | 0          | 0          | 0           | 0                           | 0          | 0         | 0          |
| <b>Phase 2 Future Volumes</b>                         | <b>478</b>                     | <b>1632</b> | <b>51</b> | <b>2161</b> | <b>71</b>                      | <b>1249</b> | <b>594</b> | <b>1915</b> | <b>996</b>            | <b>235</b> | <b>426</b> | <b>1657</b> | <b>96</b>                   | <b>100</b> | <b>93</b> | <b>290</b> |

**MARC R. ACAMPORA, PE, LLC**

**Lanier Tract Multi-Use DRI Traffic Impact Study**  
City of Gainesville, Georgia

April 2017

**Intersection 9: Dawsonville Highway at Green Hill Circle / Commercial Access**

| Weekday A.M. Peak Hour                               | Northbound Dawsonville Highway |            |           |             | Southbound Dawsonville Highway |             |           |             | Eastbound Green Hill Circle |          |            |            | Westbound Commercial Access |          |          |           |
|------------------------------------------------------|--------------------------------|------------|-----------|-------------|--------------------------------|-------------|-----------|-------------|-----------------------------|----------|------------|------------|-----------------------------|----------|----------|-----------|
|                                                      | L                              | T          | R         | Tot         | L                              | T           | R         | Tot         | L                           | T        | R          | Tot        | L                           | T        | R        | Tot       |
| <b>Counted Volumes (Thursday, November 17, 2016)</b> | 135                            | 754        | 10        | 899         | 12                             | 1404        | 52        | 1468        | 67                          | 1        | 141        | 209        | 6                           | 1        | 4        | 11        |
| Annual Background Growth                             | 10.4%                          | 10.4%      | 10.4%     |             | 10.4%                          | 10.4%       | 10.4%     |             | 10.4%                       | 10.4%    | 10.4%      |            | 10.4%                       | 10.4%    | 10.4%    |           |
| <b>No-Build Volumes</b>                              | <b>149</b>                     | <b>832</b> | <b>11</b> | <b>993</b>  | <b>13</b>                      | <b>1550</b> | <b>57</b> | <b>1621</b> | <b>74</b>                   | <b>1</b> | <b>156</b> | <b>231</b> | <b>7</b>                    | <b>1</b> | <b>4</b> | <b>12</b> |
| <b>Willow Springs Townhomes</b>                      | <b>0</b>                       | <b>3</b>   | <b>0</b>  | <b>3</b>    | <b>0</b>                       | <b>6</b>    | <b>0</b>  | <b>6</b>    | <b>0</b>                    | <b>0</b> | <b>0</b>   | <b>0</b>   | <b>0</b>                    | <b>0</b> | <b>0</b> | <b>0</b>  |
| Lanier Tract Senior Living Residential New Trips     | 0                              | 27         | 0         | 27          | 0                              | 40          | 0         | 40          | 0                           | 0        | 0          | 0          | 0                           | 0        | 0        | 0         |
| Lanier Tract Office/Retail New Trips                 | 0                              | 10         | 0         | 10          | 0                              | 3           | 0         | 3           | 0                           | 0        | 0          | 0          | 0                           | 0        | 0        | 0         |
| <b>Total Lanier Tract Site Trips</b>                 | <b>0</b>                       | <b>37</b>  | <b>0</b>  | <b>37</b>   | <b>0</b>                       | <b>43</b>   | <b>0</b>  | <b>43</b>   | <b>0</b>                    | <b>0</b> | <b>0</b>   | <b>0</b>   | <b>0</b>                    | <b>0</b> | <b>0</b> | <b>0</b>  |
| <b>Phase 1 Future Volumes</b>                        | <b>149</b>                     | <b>872</b> | <b>11</b> | <b>1033</b> | <b>13</b>                      | <b>1599</b> | <b>57</b> | <b>1670</b> | <b>74</b>                   | <b>1</b> | <b>156</b> | <b>231</b> | <b>7</b>                    | <b>1</b> | <b>4</b> | <b>12</b> |
| Retail Outparcels                                    | 0                              | 19         | 0         | 19          | 0                              | 11          | 0         | 11          | 0                           | 0        | 0          | 0          | 0                           | 0        | 0        | 0         |
| <b>Phase 2 Future Volumes</b>                        | <b>149</b>                     | <b>891</b> | <b>11</b> | <b>1052</b> | <b>13</b>                      | <b>1610</b> | <b>57</b> | <b>1681</b> | <b>74</b>                   | <b>1</b> | <b>156</b> | <b>231</b> | <b>7</b>                    | <b>1</b> | <b>4</b> | <b>12</b> |

| Weekday P.M. Peak Hour                                | Northbound Dawsonville Highway |             |           |             | Southbound Dawsonville Highway |             |           |             | Eastbound Green Hill Circle |           |            |            | Westbound Commercial Access |           |           |            |
|-------------------------------------------------------|--------------------------------|-------------|-----------|-------------|--------------------------------|-------------|-----------|-------------|-----------------------------|-----------|------------|------------|-----------------------------|-----------|-----------|------------|
|                                                       | L                              | T           | R         | Tot         | L                              | T           | R         | Tot         | L                           | T         | R          | Tot        | L                           | T         | R         | Tot        |
| <b>Counted Volumes (Thursday, September 17, 2015)</b> | 248                            | 1749        | 70        | 2067        | 40                             | 1392        | 53        | 1485        | 132                         | 9         | 138        | 279        | 60                          | 20        | 38        | 118        |
| Annual Background Growth                              | 10.4%                          | 10.4%       | 10.4%     |             | 10.4%                          | 10.4%       | 10.4%     |             | 10.4%                       | 10.4%     | 10.4%      |            | 10.4%                       | 10.4%     | 10.4%     |            |
| <b>No-Build Volumes</b>                               | <b>274</b>                     | <b>1931</b> | <b>77</b> | <b>2282</b> | <b>44</b>                      | <b>1537</b> | <b>59</b> | <b>1640</b> | <b>146</b>                  | <b>10</b> | <b>152</b> | <b>308</b> | <b>66</b>                   | <b>22</b> | <b>42</b> | <b>130</b> |
| <b>Willow Springs Townhomes</b>                       | <b>0</b>                       | <b>6</b>    | <b>0</b>  | <b>6</b>    | <b>0</b>                       | <b>5</b>    | <b>0</b>  | <b>5</b>    | <b>0</b>                    | <b>0</b>  | <b>0</b>   | <b>0</b>   | <b>0</b>                    | <b>0</b>  | <b>0</b>  | <b>0</b>   |
| Lanier Tract Senior Living Residential New Trips      | 0                              | 67          | 0         | 67          | 0                              | 44          | 0         | 44          | 0                           | 0         | 0          | 0          | 0                           | 0         | 0         | 0          |
| Lanier Tract Office/Retail New Trips                  | 0                              | 8           | 0         | 8           | 0                              | 14          | 0         | 14          | 0                           | 0         | 0          | 0          | 0                           | 0         | 0         | 0          |
| <b>Total Lanier Tract Site Trips</b>                  | <b>0</b>                       | <b>75</b>   | <b>0</b>  | <b>75</b>   | <b>0</b>                       | <b>58</b>   | <b>0</b>  | <b>58</b>   | <b>0</b>                    | <b>0</b>  | <b>0</b>   | <b>0</b>   | <b>0</b>                    | <b>0</b>  | <b>0</b>  | <b>0</b>   |
| <b>Phase 1 Future Volumes</b>                         | <b>274</b>                     | <b>2012</b> | <b>77</b> | <b>2363</b> | <b>44</b>                      | <b>1600</b> | <b>59</b> | <b>1703</b> | <b>146</b>                  | <b>10</b> | <b>152</b> | <b>308</b> | <b>66</b>                   | <b>22</b> | <b>42</b> | <b>130</b> |
| Retail Outparcels                                     | 0                              | 47          | 0         | 47          | 0                              | 50          | 0         | 50          | 0                           | 0         | 0          | 0          | 0                           | 0         | 0         | 0          |
| <b>Phase 2 Future Volumes</b>                         | <b>274</b>                     | <b>2059</b> | <b>77</b> | <b>2410</b> | <b>44</b>                      | <b>1650</b> | <b>59</b> | <b>1753</b> | <b>146</b>                  | <b>10</b> | <b>152</b> | <b>308</b> | <b>66</b>                   | <b>22</b> | <b>42</b> | <b>130</b> |

**MARC R. ACAMPORA, PE, LLC**

**Lanier Tract Multi-Use DRI Traffic Impact Study**  
City of Gainesville, Georgia

April 2017

**Intersection 10: Dawsonville Highway at Shallowford Road / Commercial Access**

| Weekday A.M. Peak Hour                               | Northbound Dawsonville Highway |       |       |     | Southbound Dawsonville Highway |       |       |      | Eastbound Shallowford Road |       |       |     | Westbound Commercial Access |       |       |     |
|------------------------------------------------------|--------------------------------|-------|-------|-----|--------------------------------|-------|-------|------|----------------------------|-------|-------|-----|-----------------------------|-------|-------|-----|
|                                                      | L                              | T     | R     | Tot | L                              | T     | R     | Tot  | L                          | T     | R     | Tot | L                           | T     | R     | Tot |
| <b>Counted Volumes (Thursday, November 17, 2016)</b> | 10                             | 738   | 13    | 761 | 1                              | 1249  | 338   | 1588 | 138                        | 2     | 8     | 148 | 2                           | 4     | 3     | 9   |
| Annual Background Growth                             | 10.4%                          | 10.4% | 10.4% |     | 10.4%                          | 10.4% | 10.4% |      | 10.4%                      | 10.4% | 10.4% |     | 10.4%                       | 10.4% | 10.4% |     |
| <b>No-Build Volumes</b>                              | 11                             | 815   | 14    | 840 | 1                              | 1379  | 373   | 1753 | 152                        | 2     | 9     | 163 | 2                           | 4     | 3     | 10  |
| <b>Willow Springs Townhomes</b>                      | 0                              | 2     | 0     | 2   | 0                              | 4     | 2     | 6    | 1                          | 0     | 0     | 1   | 0                           | 0     | 0     | 0   |
| Lanier Tract Senior Living Residential New Trips     | 0                              | 21    | 0     | 21  | 0                              | 30    | 10    | 40   | 6                          | 0     | 0     | 6   | 0                           | 0     | 0     | 0   |
| Lanier Tract Office/Retail New Trips                 | 0                              | 9     | 0     | 9   | 0                              | 2     | 1     | 3    | 1                          | 0     | 0     | 1   | 0                           | 0     | 0     | 0   |
| <b>Total Lanier Tract Site Trips</b>                 | 0                              | 30    | 0     | 30  | 0                              | 32    | 11    | 43   | 7                          | 0     | 0     | 7   | 0                           | 0     | 0     | 0   |
| <b>Phase 1 Future Volumes</b>                        | 11                             | 847   | 14    | 872 | 1                              | 1415  | 386   | 1802 | 160                        | 2     | 9     | 171 | 2                           | 4     | 3     | 10  |
| Retail Outparcels                                    | 0                              | 17    | 0     | 17  | 0                              | 10    | 1     | 11   | 2                          | 0     | 0     | 0   | 0                           | 0     | 0     | 0   |
| <b>Phase 2 Future Volumes</b>                        | 11                             | 864   | 14    | 889 | 1                              | 1425  | 387   | 1813 | 162                        | 2     | 9     | 173 | 2                           | 4     | 3     | 10  |

| Weekday P.M. Peak Hour                                | Northbound Dawsonville Highway |       |       |      | Southbound Dawsonville Highway |       |       |      | Eastbound Shallowford Road |       |       |     | Westbound Commercial Access |       |       |     |
|-------------------------------------------------------|--------------------------------|-------|-------|------|--------------------------------|-------|-------|------|----------------------------|-------|-------|-----|-----------------------------|-------|-------|-----|
|                                                       | L                              | T     | R     | Tot  | L                              | T     | R     | Tot  | L                          | T     | R     | Tot | L                           | T     | R     | Tot |
| <b>Counted Volumes (Thursday, September 17, 2015)</b> | 40                             | 1639  | 114   | 1793 | 7                              | 1161  | 463   | 1631 | 518                        | 38    | 26    | 582 | 36                          | 27    | 7     | 70  |
| Annual Background Growth                              | 10.4%                          | 10.4% | 10.4% |      | 10.4%                          | 10.4% | 10.4% |      | 10.4%                      | 10.4% | 10.4% |     | 10.4%                       | 10.4% | 10.4% |     |
| <b>No-Build Volumes</b>                               | 44                             | 1810  | 126   | 1980 | 8                              | 1282  | 511   | 1801 | 572                        | 42    | 29    | 643 | 40                          | 30    | 8     | 77  |
| <b>Willow Springs Townhomes</b>                       | 0                              | 4     | 0     | 4    | 0                              | 4     | 1     | 5    | 2                          | 0     | 0     | 2   | 0                           | 0     | 0     | 0   |
| Lanier Tract Senior Living Residential New Trips      | 0                              | 52    | 0     | 52   | 0                              | 33    | 11    | 44   | 15                         | 0     | 0     | 15  | 0                           | 0     | 0     | 0   |
| Lanier Tract Office/Retail New Trips                  | 0                              | 7     | 0     | 7    | 0                              | 12    | 2     | 14   | 1                          | 0     | 0     | 1   | 0                           | 0     | 0     | 0   |
| <b>Total Lanier Tract Site Trips</b>                  | 0                              | 59    | 0     | 59   | 0                              | 45    | 13    | 58   | 16                         | 0     | 0     | 16  | 0                           | 0     | 0     | 0   |
| <b>Phase 1 Future Volumes</b>                         | 44                             | 1873  | 126   | 2043 | 8                              | 1331  | 525   | 1864 | 590                        | 42    | 29    | 661 | 40                          | 30    | 8     | 77  |
| Retail Outparcels                                     | 0                              | 41    | 0     | 41   | 0                              | 44    | 6     | 50   | 6                          | 0     | 0     | 0   | 0                           | 0     | 0     | 0   |
| <b>Phase 2 Future Volumes</b>                         | 44                             | 1914  | 126   | 2084 | 8                              | 1375  | 531   | 1914 | 596                        | 42    | 29    | 667 | 40                          | 30    | 8     | 77  |

**MARC R. ACAMPORA, PE, LLC**

# Reliable Traffic Data Services, LLC

Tel: (770) 578-8158 | Fax: (770) 578-8159  
info@reliabletraffic.org | www.reliabletraffic.org

TMC Data  
Sportsman Club Rd @ Strickland Dr  
Gainesville, GA  
7-9am I 4.30-6.30pm

File Name : 39520001  
Site Code : 39520001  
Start Date : 11/17/2016  
Page No : 1

## Groups Printed- Cars, Buses, Trucks

|               | Sportsman Club Rd Northbound |      |       |      |            | Sportsman Club Rd Southbound |      |       |      |            | Eastbound |      |       |      |            | Strickland Dr Westbound |      |       |      |            |            |
|---------------|------------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|-----------|------|-------|------|------------|-------------------------|------|-------|------|------------|------------|
| Start Time    | Left                         | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Left      | Thru | Right | Peds | App. Total | Left                    | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 0                            | 4    | 0     | 0    | 4          | 0                            | 7    | 0     | 0    | 7          | 0         | 0    | 0     | 0    | 0          | 0                       | 0    | 0     | 0    | 0          | 11         |
| 07:15 AM      | 0                            | 1    | 0     | 0    | 1          | 0                            | 4    | 0     | 0    | 4          | 0         | 0    | 0     | 0    | 0          | 1                       | 0    | 0     | 0    | 1          | 6          |
| 07:30 AM      | 0                            | 3    | 0     | 0    | 3          | 0                            | 6    | 0     | 0    | 6          | 0         | 0    | 0     | 0    | 0          | 2                       | 0    | 0     | 0    | 2          | 11         |
| 07:45 AM      | 0                            | 2    | 0     | 0    | 2          | 0                            | 3    | 0     | 0    | 3          | 0         | 0    | 0     | 0    | 0          | 2                       | 0    | 0     | 0    | 2          | 7          |
| Total         | 0                            | 10   | 0     | 0    | 10         | 0                            | 20   | 0     | 0    | 20         | 0         | 0    | 0     | 0    | 0          | 5                       | 0    | 0     | 0    | 5          | 35         |
| 08:00 AM      | 0                            | 0    | 1     | 0    | 1          | 0                            | 9    | 0     | 0    | 9          | 0         | 0    | 0     | 0    | 0          | 5                       | 0    | 0     | 0    | 5          | 15         |
| 08:15 AM      | 0                            | 1    | 0     | 0    | 1          | 0                            | 5    | 0     | 0    | 5          | 0         | 0    | 0     | 0    | 0          | 1                       | 0    | 0     | 0    | 1          | 7          |
| 08:30 AM      | 0                            | 0    | 2     | 0    | 2          | 0                            | 0    | 0     | 0    | 0          | 0         | 0    | 0     | 0    | 0          | 0                       | 0    | 0     | 0    | 0          | 2          |
| 08:45 AM      | 0                            | 2    | 3     | 0    | 5          | 0                            | 4    | 0     | 0    | 4          | 0         | 0    | 0     | 0    | 0          | 1                       | 0    | 0     | 0    | 1          | 10         |
| Total         | 0                            | 3    | 6     | 0    | 9          | 0                            | 18   | 0     | 0    | 18         | 0         | 0    | 0     | 0    | 0          | 7                       | 0    | 0     | 0    | 7          | 34         |
| *** BREAK *** |                              |      |       |      |            |                              |      |       |      |            |           |      |       |      |            |                         |      |       |      |            |            |
| 04:30 PM      | 0                            | 4    | 0     | 0    | 4          | 0                            | 4    | 0     | 0    | 4          | 0         | 0    | 0     | 0    | 0          | 0                       | 0    | 0     | 0    | 0          | 8          |
| 04:45 PM      | 0                            | 3    | 1     | 0    | 4          | 0                            | 8    | 0     | 0    | 8          | 0         | 0    | 0     | 0    | 0          | 0                       | 0    | 0     | 0    | 0          | 12         |
| Total         | 0                            | 7    | 1     | 0    | 8          | 0                            | 12   | 0     | 0    | 12         | 0         | 0    | 0     | 0    | 0          | 0                       | 0    | 0     | 0    | 0          | 20         |
| 05:00 PM      | 0                            | 6    | 1     | 0    | 7          | 0                            | 4    | 0     | 0    | 4          | 0         | 0    | 0     | 0    | 0          | 1                       | 0    | 0     | 0    | 1          | 12         |
| 05:15 PM      | 0                            | 4    | 5     | 0    | 9          | 0                            | 7    | 0     | 0    | 7          | 0         | 0    | 0     | 0    | 0          | 4                       | 0    | 0     | 0    | 4          | 20         |
| 05:30 PM      | 0                            | 10   | 1     | 0    | 11         | 0                            | 4    | 0     | 0    | 4          | 0         | 0    | 0     | 0    | 0          | 3                       | 0    | 0     | 0    | 3          | 18         |
| 05:45 PM      | 0                            | 6    | 1     | 0    | 7          | 0                            | 7    | 0     | 0    | 7          | 0         | 0    | 0     | 0    | 0          | 0                       | 0    | 0     | 0    | 0          | 14         |
| Total         | 0                            | 26   | 8     | 0    | 34         | 0                            | 22   | 0     | 0    | 22         | 0         | 0    | 0     | 0    | 0          | 8                       | 0    | 0     | 0    | 8          | 64         |
| 06:00 PM      | 0                            | 9    | 2     | 0    | 11         | 0                            | 5    | 0     | 0    | 5          | 0         | 0    | 0     | 0    | 0          | 0                       | 0    | 0     | 0    | 0          | 16         |
| 06:15 PM      | 0                            | 5    | 1     | 0    | 6          | 0                            | 6    | 0     | 0    | 6          | 0         | 0    | 0     | 0    | 0          | 2                       | 0    | 0     | 0    | 2          | 14         |
| Grand Total   | 0                            | 60   | 18    | 0    | 78         | 0                            | 83   | 0     | 0    | 83         | 0         | 0    | 0     | 0    | 0          | 22                      | 0    | 0     | 0    | 22         | 183        |
| Apprch %      | 0                            | 76.9 | 23.1  | 0    |            | 0                            | 100  | 0     | 0    |            | 0         | 0    | 0     | 0    |            | 100                     | 0    | 0     | 0    |            |            |
| Total %       | 0                            | 32.8 | 9.8   | 0    | 42.6       | 0                            | 45.4 | 0     | 0    | 45.4       | 0         | 0    | 0     | 0    | 0          | 12                      | 0    | 0     | 0    | 12         |            |



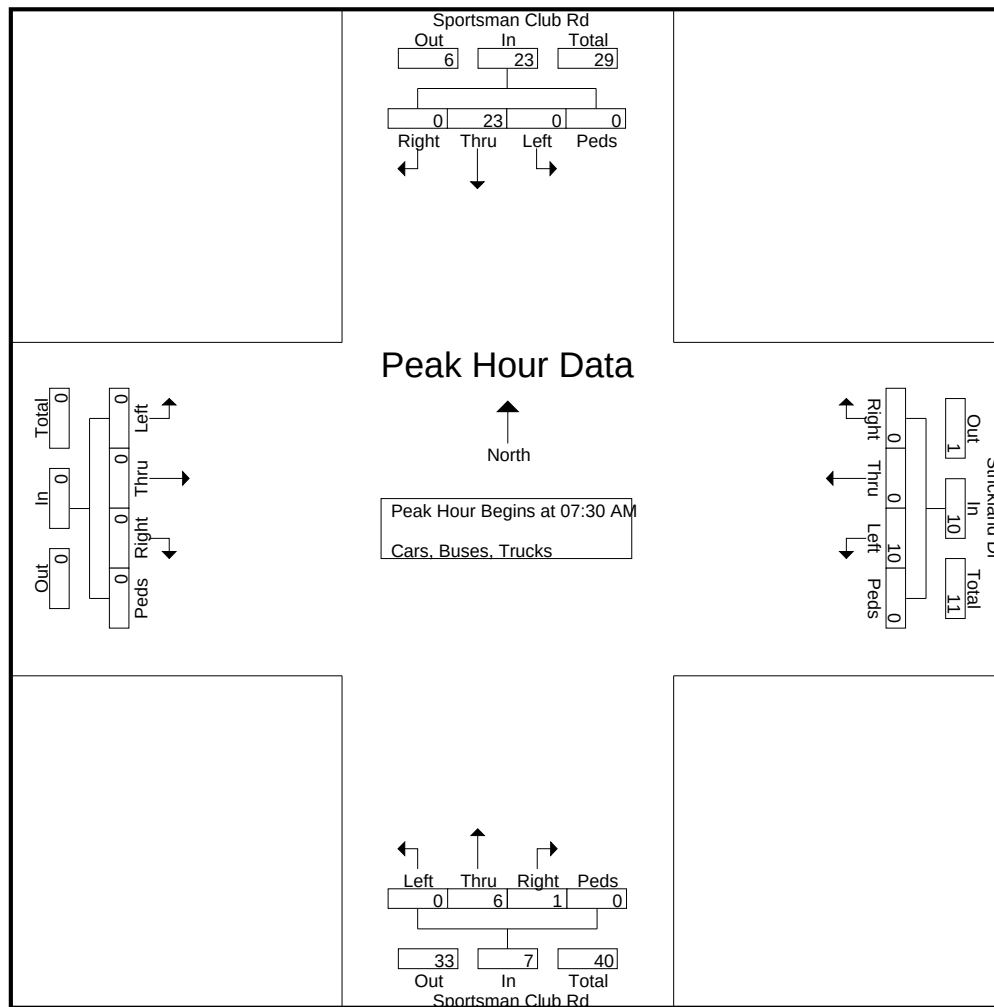
# Reliable Traffic Data Services, LLC

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TMC Data  
Sportsman Club Rd @ Strickland Dr  
Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520001  
Site Code : 39520001  
Start Date : 11/17/2016  
Page No : 2

|                                                            | Sportsman Club Rd Northbound |      |       |      |            | Sportsman Club Rd Southbound |      |       |      |            | Eastbound |      |       |      |            | Strickland Dr Westbound |      |       |      |            |            |
|------------------------------------------------------------|------------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|-----------|------|-------|------|------------|-------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                         | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Left      | Thru | Right | Peds | App. Total | Left                    | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                              |      |       |      |            |                              |      |       |      |            |           |      |       |      |            |                         |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                              |      |       |      |            |                              |      |       |      |            |           |      |       |      |            |                         |      |       |      |            |            |
| 07:30 AM                                                   | 0                            | 3    | 0     | 0    | 3          | 0                            | 6    | 0     | 0    | 6          | 0         | 0    | 0     | 0    | 0          | 2                       | 0    | 0     | 0    | 2          | 11         |
| 07:45 AM                                                   | 0                            | 2    | 0     | 0    | 2          | 0                            | 3    | 0     | 0    | 3          | 0         | 0    | 0     | 0    | 0          | 2                       | 0    | 0     | 0    | 2          | 7          |
| 08:00 AM                                                   | 0                            | 0    | 1     | 0    | 1          | 0                            | 9    | 0     | 0    | 9          | 0         | 0    | 0     | 0    | 0          | 5                       | 0    | 0     | 0    | 5          | 15         |
| 08:15 AM                                                   | 0                            | 1    | 0     | 0    | 1          | 0                            | 5    | 0     | 0    | 5          | 0         | 0    | 0     | 0    | 0          | 1                       | 0    | 0     | 0    | 1          | 7          |
| Total Volume                                               | 0                            | 6    | 1     | 0    | 7          | 0                            | 23   | 0     | 0    | 23         | 0         | 0    | 0     | 0    | 0          | 10                      | 0    | 0     | 0    | 10         | 40         |
| % App. Total                                               | 0                            | 85.7 | 14.3  | 0    |            | 0                            | 100  | 0     | 0    |            | 0         | 0    | 0     | 0    |            | 100                     | 0    | 0     | 0    |            |            |
| PHF                                                        | .000                         | .500 | .250  | .000 | .583       | .000                         | .639 | .000  | .000 | .639       | .000      | .000 | .000  | .000 | .000       | .500                    | .000 | .000  | .000 | .500       | .667       |



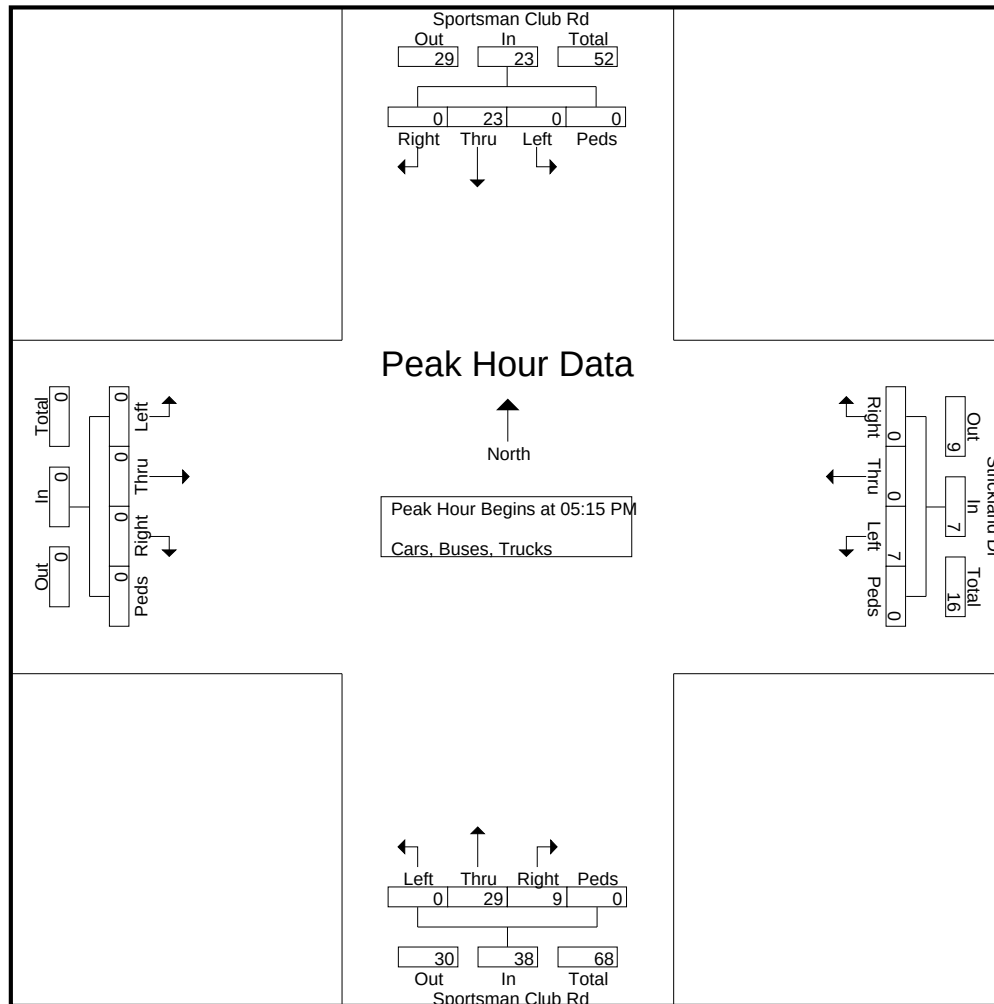
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TMC Data  
Sportsman Club Rd @ Strickland Dr  
Gainesville, GA  
7-9am I 4.30-6.30pm

File Name : 39520001  
Site Code : 39520001  
Start Date : 11/17/2016  
Page No : 3

|                                                            | Sportsman Club Rd Northbound |      |       |      |            | Sportsman Club Rd Southbound |      |       |      |            | Eastbound |      |       |      |            | Strickland Dr Westbound |      |       |      |            |            |
|------------------------------------------------------------|------------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|-----------|------|-------|------|------------|-------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                         | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Left      | Thru | Right | Peds | App. Total | Left                    | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1 |                              |      |       |      |            |                              |      |       |      |            |           |      |       |      |            |                         |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 05:15 PM       |                              |      |       |      |            |                              |      |       |      |            |           |      |       |      |            |                         |      |       |      |            |            |
| 05:15 PM                                                   | 0                            | 4    | 5     | 0    | 9          | 0                            | 7    | 0     | 0    | 7          | 0         | 0    | 0     | 0    | 0          | 4                       | 0    | 0     | 0    | 4          | 20         |
| 05:30 PM                                                   | 0                            | 10   | 1     | 0    | 11         | 0                            | 4    | 0     | 0    | 4          | 0         | 0    | 0     | 0    | 0          | 3                       | 0    | 0     | 0    | 3          | 18         |
| 05:45 PM                                                   | 0                            | 6    | 1     | 0    | 7          | 0                            | 7    | 0     | 0    | 7          | 0         | 0    | 0     | 0    | 0          | 0                       | 0    | 0     | 0    | 0          | 14         |
| 06:00 PM                                                   | 0                            | 9    | 2     | 0    | 11         | 0                            | 5    | 0     | 0    | 5          | 0         | 0    | 0     | 0    | 0          | 0                       | 0    | 0     | 0    | 0          | 16         |
| Total Volume                                               | 0                            | 29   | 9     | 0    | 38         | 0                            | 23   | 0     | 0    | 23         | 0         | 0    | 0     | 0    | 0          | 7                       | 0    | 0     | 0    | 7          | 68         |
| % App. Total                                               | 0                            | 76.3 | 23.7  | 0    |            | 0                            | 100  | 0     | 0    |            | 0         | 0    | 0     | 0    |            | 100                     | 0    | 0     | 0    |            |            |
| PHF                                                        | .000                         | .725 | .450  | .000 | .864       | .000                         | .821 | .000  | .000 | .821       | .000      | .000 | .000  | .000 | .000       | .438                    | .000 | .000  | .000 | .438       | .850       |



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TMC Data  
Dawsonville Hwy (SR53) @  
Sportsman Club Rd, Gainesville, GA  
7-9am I 4.30-6.30pm

File Name : 39520002  
Site Code : 39520002  
Start Date : 11/17/2016  
Page No : 1

## Groups Printed- Cars, Buses, Trucks

|               | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Truck Turn Around<br>Eastbound |      |       |      |            | Sportsman Club Rd<br>Westbound |      |       |      |            |            |
|---------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|--------------------------------|------|-------|------|------------|--------------------------------|------|-------|------|------------|------------|
| Start Time    | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                           | Thru | Right | Peds | App. Total | Left                           | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 0                                    | 156  | 4     | 0    | 160        | 1                                    | 326  | 0     | 0    | 327        | 0                              | 0    | 0     | 0    | 0          | 5                              | 0    | 4     | 0    | 9          | 496        |
| 07:15 AM      | 0                                    | 165  | 2     | 0    | 167        | 4                                    | 391  | 0     | 0    | 395        | 0                              | 0    | 0     | 0    | 0          | 3                              | 0    | 6     | 0    | 9          | 571        |
| 07:30 AM      | 0                                    | 168  | 2     | 0    | 170        | 4                                    | 492  | 0     | 0    | 496        | 0                              | 0    | 0     | 0    | 0          | 6                              | 0    | 2     | 0    | 8          | 674        |
| 07:45 AM      | 0                                    | 189  | 1     | 0    | 190        | 1                                    | 448  | 0     | 0    | 449        | 0                              | 0    | 0     | 0    | 0          | 4                              | 0    | 2     | 0    | 6          | 645        |
| Total         | 0                                    | 678  | 9     | 0    | 687        | 10                                   | 1657 | 0     | 0    | 1667       | 0                              | 0    | 0     | 0    | 0          | 18                             | 0    | 14    | 0    | 32         | 2386       |
| 08:00 AM      | 0                                    | 221  | 3     | 0    | 224        | 0                                    | 356  | 0     | 0    | 356        | 0                              | 0    | 0     | 0    | 0          | 12                             | 0    | 5     | 0    | 17         | 597        |
| 08:15 AM      | 0                                    | 175  | 3     | 0    | 178        | 1                                    | 364  | 0     | 0    | 365        | 0                              | 0    | 0     | 0    | 0          | 4                              | 0    | 1     | 0    | 5          | 548        |
| 08:30 AM      | 2                                    | 192  | 3     | 0    | 197        | 1                                    | 320  | 2     | 0    | 323        | 0                              | 0    | 0     | 0    | 0          | 1                              | 0    | 1     | 0    | 2          | 522        |
| 08:45 AM      | 1                                    | 164  | 4     | 0    | 169        | 3                                    | 267  | 0     | 0    | 270        | 0                              | 0    | 0     | 0    | 0          | 8                              | 0    | 0     | 0    | 8          | 447        |
| Total         | 3                                    | 752  | 13    | 0    | 768        | 5                                    | 1307 | 2     | 0    | 1314       | 0                              | 0    | 0     | 0    | 0          | 25                             | 0    | 7     | 0    | 32         | 2114       |
| *** BREAK *** |                                      |      |       |      |            |                                      |      |       |      |            |                                |      |       |      |            |                                |      |       |      |            |            |
| 04:30 PM      | 0                                    | 344  | 9     | 0    | 353        | 1                                    | 258  | 0     | 0    | 259        | 0                              | 0    | 0     | 0    | 0          | 4                              | 0    | 1     | 0    | 5          | 617        |
| 04:45 PM      | 0                                    | 411  | 3     | 0    | 414        | 1                                    | 239  | 0     | 0    | 240        | 0                              | 0    | 0     | 0    | 0          | 8                              | 0    | 2     | 0    | 10         | 664        |
| Total         | 0                                    | 755  | 12    | 0    | 767        | 2                                    | 497  | 0     | 0    | 499        | 0                              | 0    | 0     | 0    | 0          | 12                             | 0    | 3     | 0    | 15         | 1281       |
| 05:00 PM      | 2                                    | 410  | 3     | 0    | 415        | 6                                    | 271  | 0     | 0    | 277        | 0                              | 0    | 0     | 0    | 0          | 4                              | 0    | 2     | 0    | 6          | 698        |
| 05:15 PM      | 0                                    | 437  | 6     | 0    | 443        | 4                                    | 267  | 0     | 0    | 271        | 0                              | 0    | 0     | 0    | 0          | 10                             | 0    | 4     | 0    | 14         | 728        |
| 05:30 PM      | 0                                    | 413  | 7     | 0    | 420        | 4                                    | 262  | 0     | 0    | 266        | 0                              | 0    | 0     | 0    | 0          | 6                              | 0    | 1     | 0    | 7          | 693        |
| 05:45 PM      | 0                                    | 374  | 5     | 0    | 379        | 3                                    | 267  | 0     | 0    | 270        | 0                              | 0    | 0     | 0    | 0          | 6                              | 0    | 3     | 0    | 9          | 658        |
| Total         | 2                                    | 1634 | 21    | 0    | 1657       | 17                                   | 1067 | 0     | 0    | 1084       | 0                              | 0    | 0     | 0    | 0          | 26                             | 0    | 10    | 0    | 36         | 2777       |
| 06:00 PM      | 1                                    | 421  | 12    | 0    | 434        | 0                                    | 250  | 0     | 0    | 250        | 0                              | 0    | 0     | 0    | 0          | 6                              | 0    | 1     | 0    | 7          | 691        |
| 06:15 PM      | 0                                    | 318  | 7     | 0    | 325        | 3                                    | 252  | 0     | 0    | 255        | 0                              | 0    | 0     | 0    | 0          | 7                              | 0    | 3     | 0    | 10         | 590        |
| Grand Total   | 6                                    | 4558 | 74    | 0    | 4638       | 37                                   | 5030 | 2     | 0    | 5069       | 0                              | 0    | 0     | 0    | 0          | 94                             | 0    | 38    | 0    | 132        | 9839       |
| Apprch %      | 0.1                                  | 98.3 | 1.6   | 0    |            | 0.7                                  | 99.2 | 0     | 0    |            | 0                              | 0    | 0     | 0    |            | 71.2                           | 0    | 28.8  | 0    |            |            |
| Total %       | 0.1                                  | 46.3 | 0.8   | 0    | 47.1       | 0.4                                  | 51.1 | 0     | 0    | 51.5       | 0                              | 0    | 0     | 0    |            | 1                              | 0    | 0.4   | 0    | 1.3        |            |

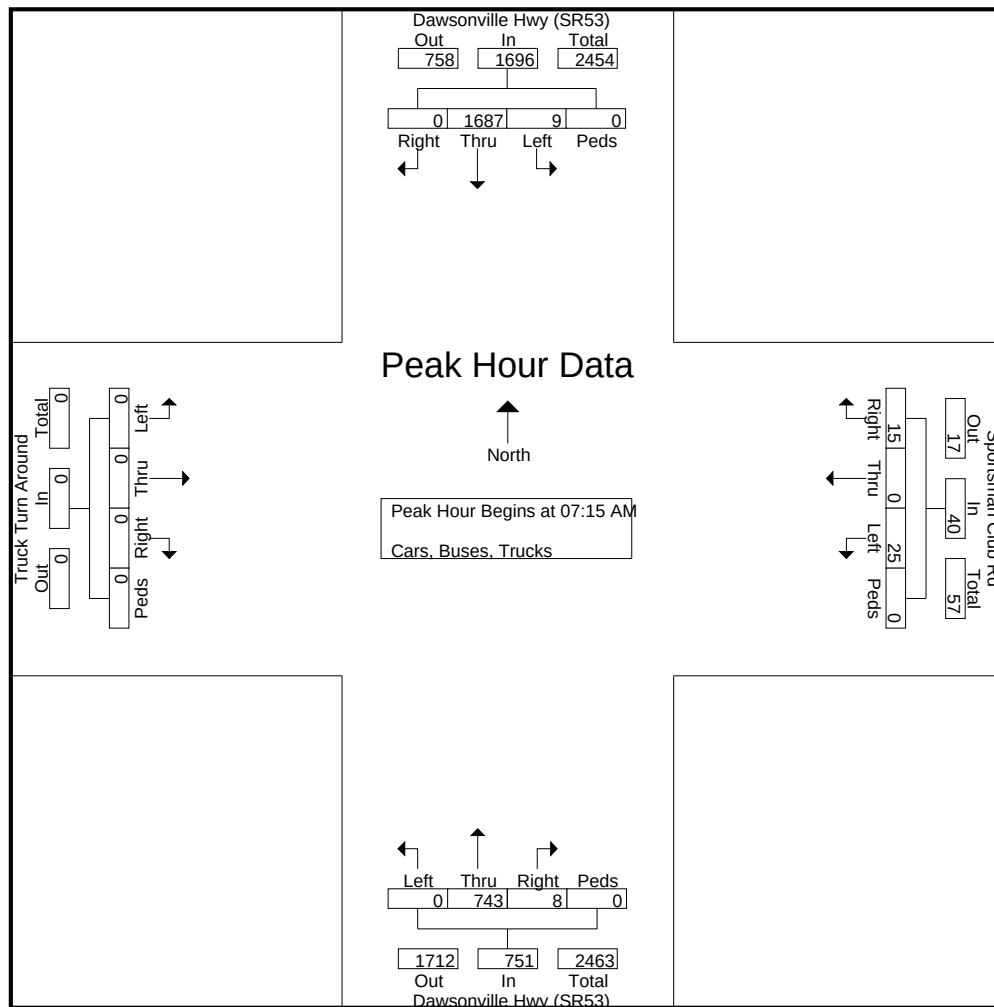
# Reliable Traffic Data Services, LLC

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TMC Data  
Dawsonville Hwy (SR53) @  
Sportsman Club Rd, Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520002  
Site Code : 39520002  
Start Date : 11/17/2016  
Page No : 2

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Truck Turn Around<br>Eastbound |      |       |      |            | Sportsman Club Rd<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|--------------------------------|------|-------|------|------------|--------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                           | Thru | Right | Peds | App. Total | Left                           | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                                |      |       |      |            |                                |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:15 AM       |                                      |      |       |      |            |                                      |      |       |      |            |                                |      |       |      |            |                                |      |       |      |            |            |
| 07:15 AM                                                   | 0                                    | 165  | 2     | 0    | 167        | 4                                    | 391  | 0     | 0    | 395        | 0                              | 0    | 0     | 0    | 0          | 3                              | 0    | 6     | 0    | 9          | 571        |
| 07:30 AM                                                   | 0                                    | 168  | 2     | 0    | 170        | 4                                    | 492  | 0     | 0    | 496        | 0                              | 0    | 0     | 0    | 0          | 6                              | 0    | 2     | 0    | 8          | 674        |
| 07:45 AM                                                   | 0                                    | 189  | 1     | 0    | 190        | 1                                    | 448  | 0     | 0    | 449        | 0                              | 0    | 0     | 0    | 0          | 4                              | 0    | 2     | 0    | 6          | 645        |
| 08:00 AM                                                   | 0                                    | 221  | 3     | 0    | 224        | 0                                    | 356  | 0     | 0    | 356        | 0                              | 0    | 0     | 0    | 0          | 12                             | 0    | 5     | 0    | 17         | 597        |
| Total Volume                                               | 0                                    | 743  | 8     | 0    | 751        | 9                                    | 1687 | 0     | 0    | 1696       | 0                              | 0    | 0     | 0    | 0          | 25                             | 0    | 15    | 0    | 40         | 2487       |
| % App. Total                                               | 0                                    | 98.9 | 1.1   | 0    |            | 0.5                                  | 99.5 | 0     | 0    |            | 0                              | 0    | 0     | 0    |            | 62.5                           | 0    | 37.5  | 0    |            |            |
| PHF                                                        | .000                                 | .840 | .667  | .000 | .838       | .563                                 | .857 | .000  | .000 | .855       | .000                           | .000 | .000  | .000 | .000       | .521                           | .000 | .625  | .000 | .588       | .922       |



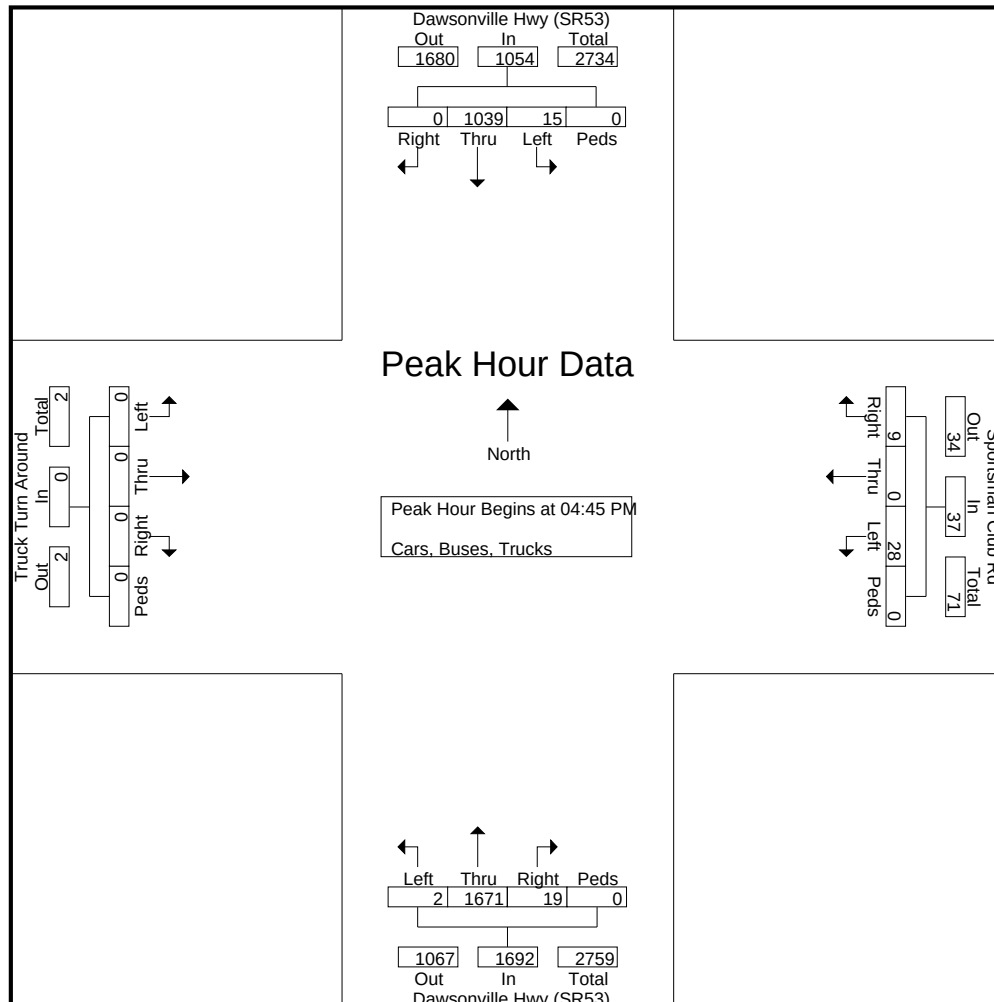
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TMC Data  
Dawsonville Hwy (SR53) @  
Sportsman Club Rd, Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520002  
Site Code : 39520002  
Start Date : 11/17/2016  
Page No : 3

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Truck Turn Around<br>Eastbound |      |       |      |            | Sportsman Club Rd<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|--------------------------------|------|-------|------|------------|--------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                           | Thru | Right | Peds | App. Total | Left                           | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                                |      |       |      |            |                                |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 04:45 PM       |                                      |      |       |      |            |                                      |      |       |      |            |                                |      |       |      |            |                                |      |       |      |            |            |
| 04:45 PM                                                   | 0                                    | 411  | 3     | 0    | 414        | 1                                    | 239  | 0     | 0    | 240        | 0                              | 0    | 0     | 0    | 0          | 8                              | 0    | 2     | 0    | 10         | 664        |
| 05:00 PM                                                   | 2                                    | 410  | 3     | 0    | 415        | 6                                    | 271  | 0     | 0    | 277        | 0                              | 0    | 0     | 0    | 0          | 4                              | 0    | 2     | 0    | 6          | 698        |
| 05:15 PM                                                   | 0                                    | 437  | 6     | 0    | 443        | 4                                    | 267  | 0     | 0    | 271        | 0                              | 0    | 0     | 0    | 0          | 10                             | 0    | 4     | 0    | 14         | 728        |
| 05:30 PM                                                   | 0                                    | 413  | 7     | 0    | 420        | 4                                    | 262  | 0     | 0    | 266        | 0                              | 0    | 0     | 0    | 0          | 6                              | 0    | 1     | 0    | 7          | 693        |
| Total Volume                                               | 2                                    | 1671 | 19    | 0    | 1692       | 15                                   | 1039 | 0     | 0    | 1054       | 0                              | 0    | 0     | 0    | 0          | 28                             | 0    | 9     | 0    | 37         | 2783       |
| % App. Total                                               | 0.1                                  | 98.8 | 1.1   | 0    |            | 1.4                                  | 98.6 | 0     | 0    |            | 0                              | 0    | 0     | 0    |            | 75.7                           | 0    | 24.3  | 0    |            |            |
| PHF                                                        | .250                                 | .956 | .679  | .000 | .955       | .625                                 | .958 | .000  | .000 | .951       | .000                           | .000 | .000  | .000 | .000       | .700                           | .000 | .563  | .000 | .661       | .956       |



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TMC Data  
Dawsonville Hwy (SR53) @ Avonlea Way  
Gainesville, GA  
7-9am I 4.30-6.30pm

File Name : 39520003  
Site Code : 39520003  
Start Date : 11/17/2016  
Page No : 1

## Groups Printed- Cars, Buses, Trucks

|               | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Avonlea Way<br>Eastbound |      |       |      |            | Residential Drwy<br>Westbound |      |       |      |            |            |
|---------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|--------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|------------|
| Start Time    | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                     | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 3                                    | 160  | 0     | 0    | 163        | 0                                    | 324  | 0     | 0    | 324        | 6                        | 0    | 18    | 0    | 24         | 0                             | 0    | 0     | 0    | 0          | 511        |
| 07:15 AM      | 2                                    | 162  | 1     | 0    | 165        | 0                                    | 381  | 0     | 0    | 381        | 6                        | 0    | 25    | 0    | 31         | 1                             | 0    | 0     | 0    | 1          | 578        |
| 07:30 AM      | 6                                    | 164  | 1     | 0    | 171        | 0                                    | 485  | 2     | 0    | 487        | 2                        | 0    | 22    | 0    | 24         | 0                             | 0    | 0     | 0    | 0          | 682        |
| 07:45 AM      | 2                                    | 193  | 0     | 0    | 195        | 0                                    | 442  | 1     | 0    | 443        | 7                        | 0    | 19    | 0    | 26         | 0                             | 0    | 0     | 0    | 0          | 664        |
| Total         | 13                                   | 679  | 2     | 0    | 694        | 0                                    | 1632 | 3     | 0    | 1635       | 21                       | 0    | 84    | 0    | 105        | 1                             | 0    | 0     | 0    | 1          | 2435       |
| 08:00 AM      | 2                                    | 216  | 0     | 0    | 218        | 0                                    | 367  | 1     | 0    | 368        | 4                        | 0    | 15    | 0    | 19         | 0                             | 0    | 0     | 0    | 0          | 605        |
| 08:15 AM      | 2                                    | 184  | 0     | 0    | 186        | 0                                    | 374  | 2     | 0    | 376        | 2                        | 0    | 16    | 0    | 18         | 0                             | 0    | 0     | 0    | 0          | 580        |
| 08:30 AM      | 4                                    | 198  | 0     | 0    | 202        | 0                                    | 326  | 3     | 0    | 329        | 3                        | 0    | 21    | 0    | 24         | 0                             | 0    | 0     | 0    | 0          | 555        |
| 08:45 AM      | 3                                    | 167  | 0     | 0    | 170        | 0                                    | 278  | 2     | 0    | 280        | 2                        | 0    | 14    | 0    | 16         | 0                             | 0    | 0     | 0    | 0          | 466        |
| Total         | 11                                   | 765  | 0     | 0    | 776        | 0                                    | 1345 | 8     | 0    | 1353       | 11                       | 0    | 66    | 0    | 77         | 0                             | 0    | 0     | 0    | 0          | 2206       |
| *** BREAK *** |                                      |      |       |      |            |                                      |      |       |      |            |                          |      |       |      |            |                               |      |       |      |            |            |
| 04:30 PM      | 14                                   | 351  | 0     | 0    | 365        | 0                                    | 267  | 3     | 0    | 270        | 0                        | 0    | 9     | 0    | 9          | 0                             | 0    | 0     | 0    | 0          | 644        |
| 04:45 PM      | 10                                   | 412  | 0     | 0    | 422        | 0                                    | 248  | 6     | 0    | 254        | 1                        | 0    | 6     | 0    | 7          | 0                             | 0    | 0     | 0    | 0          | 683        |
| Total         | 24                                   | 763  | 0     | 0    | 787        | 0                                    | 515  | 9     | 0    | 524        | 1                        | 0    | 15    | 0    | 16         | 0                             | 0    | 0     | 0    | 0          | 1327       |
| 05:00 PM      | 21                                   | 416  | 0     | 0    | 437        | 0                                    | 273  | 4     | 0    | 277        | 7                        | 0    | 9     | 0    | 16         | 0                             | 0    | 0     | 0    | 0          | 730        |
| 05:15 PM      | 10                                   | 442  | 0     | 0    | 452        | 0                                    | 279  | 2     | 0    | 281        | 1                        | 0    | 18    | 0    | 19         | 0                             | 0    | 0     | 0    | 0          | 752        |
| 05:30 PM      | 13                                   | 418  | 0     | 0    | 431        | 1                                    | 272  | 6     | 0    | 279        | 0                        | 0    | 9     | 0    | 9          | 0                             | 0    | 0     | 0    | 0          | 719        |
| 05:45 PM      | 18                                   | 374  | 0     | 0    | 392        | 1                                    | 278  | 2     | 0    | 281        | 3                        | 0    | 11    | 0    | 14         | 0                             | 0    | 0     | 0    | 0          | 687        |
| Total         | 62                                   | 1650 | 0     | 0    | 1712       | 2                                    | 1102 | 14    | 0    | 1118       | 11                       | 0    | 47    | 0    | 58         | 0                             | 0    | 0     | 0    | 0          | 2888       |
| 06:00 PM      | 21                                   | 420  | 0     | 0    | 441        | 1                                    | 256  | 4     | 0    | 261        | 3                        | 0    | 12    | 0    | 15         | 0                             | 0    | 0     | 0    | 0          | 717        |
| 06:15 PM      | 13                                   | 328  | 0     | 0    | 341        | 0                                    | 247  | 3     | 0    | 250        | 1                        | 0    | 10    | 0    | 11         | 0                             | 0    | 0     | 0    | 0          | 602        |
| Grand Total   | 144                                  | 4605 | 2     | 0    | 4751       | 3                                    | 5097 | 41    | 0    | 5141       | 48                       | 0    | 234   | 0    | 282        | 1                             | 0    | 0     | 0    | 1          | 10175      |
| Apprch %      | 3                                    | 96.9 | 0     | 0    |            | 0.1                                  | 99.1 | 0.8   | 0    |            | 17                       | 0    | 83    | 0    |            | 100                           | 0    | 0     | 0    |            |            |
| Total %       | 1.4                                  | 45.3 | 0     | 0    | 46.7       | 0                                    | 50.1 | 0.4   | 0    | 50.5       | 0.5                      | 0    | 2.3   | 0    | 2.8        | 0                             | 0    | 0     | 0    | 0          |            |

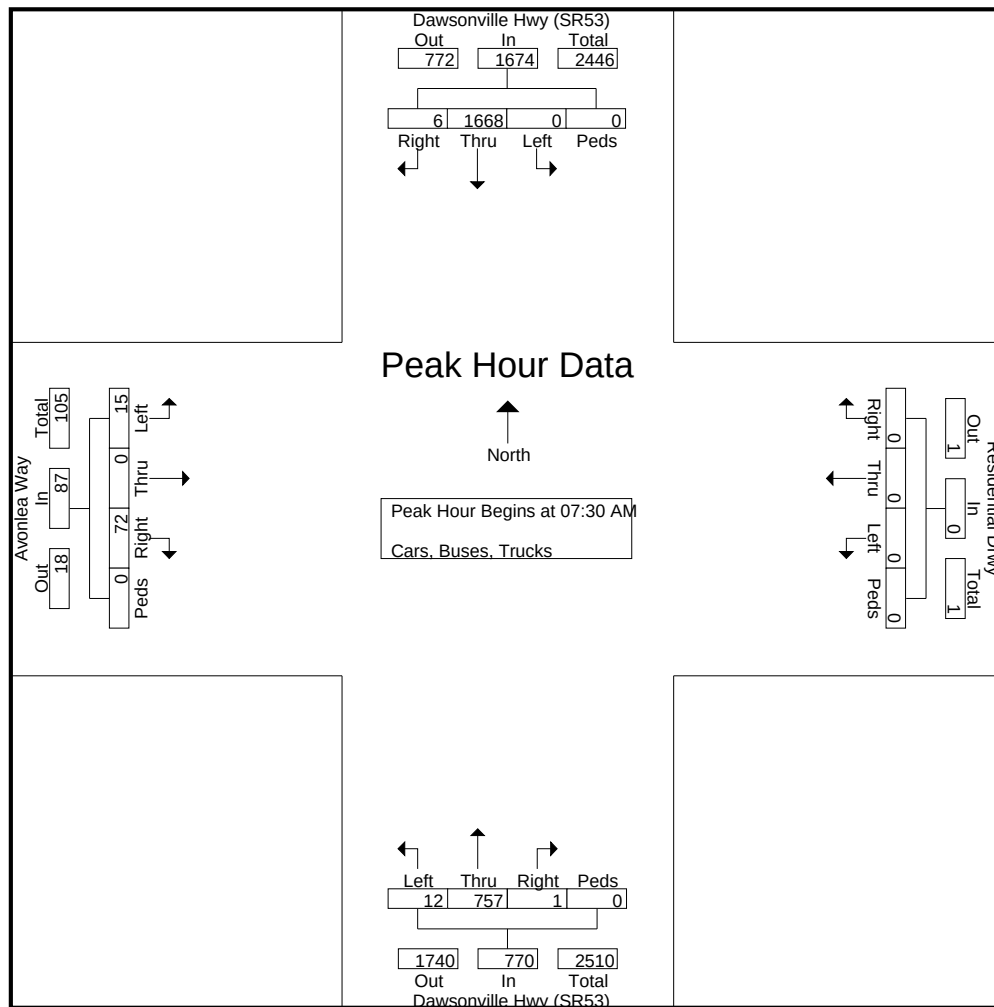
# Reliable Traffic Data Services, LLC

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TMC Data  
Dawsonville Hwy (SR53) @ Avonlea Way  
Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520003  
Site Code : 39520003  
Start Date : 11/17/2016  
Page No : 2

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Avonlea Way<br>Eastbound |      |       |      |            | Residential Drwy<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|--------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                     | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                          |      |       |      |            |                               |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                                      |      |       |      |            |                                      |      |       |      |            |                          |      |       |      |            |                               |      |       |      |            |            |
| 07:30 AM                                                   | 6                                    | 164  | 1     | 0    | 171        | 0                                    | 485  | 2     | 0    | 487        | 2                        | 0    | 22    | 0    | 24         | 0                             | 0    | 0     | 0    | 0          | 682        |
| 07:45 AM                                                   | 2                                    | 193  | 0     | 0    | 195        | 0                                    | 442  | 1     | 0    | 443        | 7                        | 0    | 19    | 0    | 26         | 0                             | 0    | 0     | 0    | 0          | 664        |
| 08:00 AM                                                   | 2                                    | 216  | 0     | 0    | 218        | 0                                    | 367  | 1     | 0    | 368        | 4                        | 0    | 15    | 0    | 19         | 0                             | 0    | 0     | 0    | 0          | 605        |
| 08:15 AM                                                   | 2                                    | 184  | 0     | 0    | 186        | 0                                    | 374  | 2     | 0    | 376        | 2                        | 0    | 16    | 0    | 18         | 0                             | 0    | 0     | 0    | 0          | 580        |
| Total Volume                                               | 12                                   | 757  | 1     | 0    | 770        | 0                                    | 1668 | 6     | 0    | 1674       | 15                       | 0    | 72    | 0    | 87         | 0                             | 0    | 0     | 0    | 0          | 2531       |
| % App. Total                                               | 1.6                                  | 98.3 | 0.1   | 0    |            | 0                                    | 99.6 | 0.4   | 0    |            | 17.2                     | 0    | 82.8  | 0    |            | 0                             | 0    | 0     | 0    |            |            |
| PHF                                                        | .500                                 | .876 | .250  | .000 | .883       | .000                                 | .860 | .750  | .000 | .859       | .536                     | .000 | .818  | .000 | .837       | .000                          | .000 | .000  | .000 | .000       | .928       |





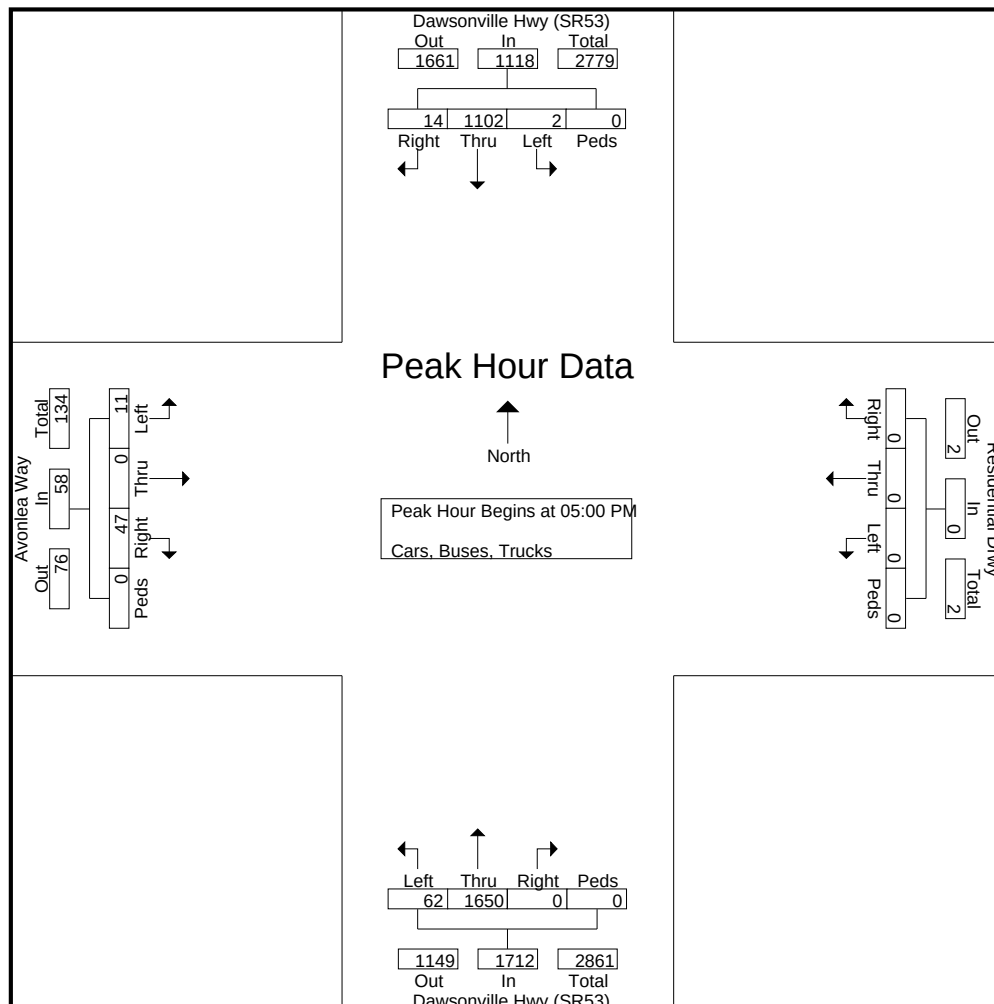
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TMC Data  
Dawsonville Hwy (SR53) @ Avonlea Way  
Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520003  
Site Code : 39520003  
Start Date : 11/17/2016  
Page No : 3

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Avonlea Way<br>Eastbound |      |       |      |            | Residential Drwy<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|--------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                     | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                          |      |       |      |            |                               |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                                      |      |       |      |            |                                      |      |       |      |            |                          |      |       |      |            |                               |      |       |      |            |            |
| 05:00 PM                                                   | 21                                   | 416  | 0     | 0    | 437        | 0                                    | 273  | 4     | 0    | 277        | 7                        | 0    | 9     | 0    | 16         | 0                             | 0    | 0     | 0    | 0          | 730        |
| 05:15 PM                                                   | 10                                   | 442  | 0     | 0    | 452        | 0                                    | 279  | 2     | 0    | 281        | 1                        | 0    | 18    | 0    | 19         | 0                             | 0    | 0     | 0    | 0          | 752        |
| 05:30 PM                                                   | 13                                   | 418  | 0     | 0    | 431        | 1                                    | 272  | 6     | 0    | 279        | 0                        | 0    | 9     | 0    | 9          | 0                             | 0    | 0     | 0    | 0          | 719        |
| 05:45 PM                                                   | 18                                   | 374  | 0     | 0    | 392        | 1                                    | 278  | 2     | 0    | 281        | 3                        | 0    | 11    | 0    | 14         | 0                             | 0    | 0     | 0    | 0          | 687        |
| Total Volume                                               | 62                                   | 1650 | 0     | 0    | 1712       | 2                                    | 1102 | 14    | 0    | 1118       | 11                       | 0    | 47    | 0    | 58         | 0                             | 0    | 0     | 0    | 0          | 2888       |
| % App. Total                                               | 3.6                                  | 96.4 | 0     | 0    |            | 0.2                                  | 98.6 | 1.3   | 0    |            | 19                       | 0    | 81    | 0    |            | 0                             | 0    | 0     | 0    |            |            |
| PHF                                                        | .738                                 | .933 | .000  | .000 | .947       | .500                                 | .987 | .583  | .000 | .995       | .393                     | .000 | .653  | .000 | .763       | .000                          | .000 | .000  | .000 | .000       | .960       |



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TMC Data  
Dawsonville Hwy (SR53) @ Canterbury Rd  
Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520004  
Site Code : 39520004  
Start Date : 11/17/2016  
Page No : 1

## Groups Printed- Cars, Buses, Trucks

|               | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |         |            | Canterbury Rd<br>Eastbound |      |       |      |            | Westbound |      |       |      |            |            |
|---------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|---------|------------|----------------------------|------|-------|------|------------|-----------|------|-------|------|------------|------------|
| Start Time    | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | U-Turns | App. Total | Left                       | Thru | Right | Peds | App. Total | Left      | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 4                                    | 151  | 0     | 0    | 155        | 0                                    | 342  | 2     | 0       | 344        | 5                          | 0    | 22    | 0    | 27         | 0         | 0    | 0     | 0    | 0          | 526        |
| 07:15 AM      | 7                                    | 160  | 0     | 0    | 167        | 0                                    | 456  | 1     | 0       | 457        | 3                          | 0    | 29    | 0    | 32         | 0         | 0    | 0     | 0    | 0          | 656        |
| 07:30 AM      | 6                                    | 168  | 0     | 0    | 174        | 0                                    | 487  | 4     | 0       | 491        | 5                          | 0    | 23    | 0    | 28         | 0         | 0    | 0     | 0    | 0          | 693        |
| 07:45 AM      | 7                                    | 180  | 0     | 0    | 187        | 0                                    | 436  | 1     | 1       | 438        | 4                          | 0    | 27    | 0    | 31         | 0         | 0    | 0     | 0    | 0          | 656        |
| Total         | 24                                   | 659  | 0     | 0    | 683        | 0                                    | 1721 | 8     | 1       | 1730       | 17                         | 0    | 101   | 0    | 118        | 0         | 0    | 0     | 0    | 0          | 2531       |
| 08:00 AM      | 3                                    | 214  | 0     | 0    | 217        | 0                                    | 403  | 1     | 0       | 404        | 6                          | 0    | 16    | 0    | 22         | 0         | 0    | 0     | 0    | 0          | 643        |
| 08:15 AM      | 8                                    | 178  | 0     | 0    | 186        | 0                                    | 392  | 3     | 0       | 395        | 3                          | 0    | 18    | 0    | 21         | 0         | 0    | 0     | 0    | 0          | 602        |
| 08:30 AM      | 3                                    | 180  | 0     | 0    | 183        | 0                                    | 326  | 2     | 2       | 330        | 3                          | 0    | 11    | 0    | 14         | 0         | 0    | 0     | 0    | 0          | 527        |
| 08:45 AM      | 7                                    | 164  | 0     | 0    | 171        | 0                                    | 297  | 0     | 0       | 297        | 2                          | 0    | 8     | 0    | 10         | 0         | 0    | 0     | 0    | 0          | 478        |
| Total         | 21                                   | 736  | 0     | 0    | 757        | 0                                    | 1418 | 6     | 2       | 1426       | 14                         | 0    | 53    | 0    | 67         | 0         | 0    | 0     | 0    | 0          | 2250       |
| *** BREAK *** |                                      |      |       |      |            |                                      |      |       |         |            |                            |      |       |      |            |           |      |       |      |            |            |
| 04:30 PM      | 22                                   | 367  | 0     | 0    | 389        | 0                                    | 263  | 4     | 1       | 268        | 2                          | 0    | 13    | 0    | 15         | 0         | 0    | 0     | 0    | 0          | 672        |
| 04:45 PM      | 25                                   | 398  | 0     | 0    | 423        | 0                                    | 267  | 1     | 1       | 269        | 1                          | 0    | 16    | 0    | 17         | 0         | 0    | 0     | 0    | 0          | 709        |
| Total         | 47                                   | 765  | 0     | 0    | 812        | 0                                    | 530  | 5     | 2       | 537        | 3                          | 0    | 29    | 0    | 32         | 0         | 0    | 0     | 0    | 0          | 1381       |
| 05:00 PM      | 21                                   | 426  | 0     | 0    | 447        | 0                                    | 271  | 1     | 1       | 273        | 3                          | 0    | 8     | 0    | 11         | 0         | 0    | 0     | 0    | 0          | 731        |
| 05:15 PM      | 33                                   | 432  | 0     | 0    | 465        | 0                                    | 278  | 3     | 0       | 281        | 2                          | 0    | 4     | 0    | 6          | 0         | 0    | 0     | 0    | 0          | 752        |
| 05:30 PM      | 26                                   | 418  | 0     | 0    | 444        | 0                                    | 272  | 5     | 0       | 277        | 1                          | 0    | 7     | 0    | 8          | 0         | 0    | 0     | 0    | 0          | 729        |
| 05:45 PM      | 31                                   | 406  | 0     | 0    | 437        | 0                                    | 284  | 5     | 2       | 291        | 1                          | 0    | 9     | 0    | 10         | 0         | 0    | 0     | 0    | 0          | 738        |
| Total         | 111                                  | 1682 | 0     | 0    | 1793       | 0                                    | 1105 | 14    | 3       | 1122       | 7                          | 0    | 28    | 0    | 35         | 0         | 0    | 0     | 0    | 0          | 2950       |
| 06:00 PM      | 26                                   | 387  | 0     | 0    | 413        | 0                                    | 278  | 7     | 0       | 285        | 1                          | 0    | 16    | 0    | 17         | 0         | 0    | 0     | 0    | 0          | 715        |
| 06:15 PM      | 23                                   | 364  | 0     | 0    | 387        | 0                                    | 267  | 5     | 0       | 272        | 2                          | 0    | 11    | 0    | 13         | 0         | 0    | 0     | 0    | 0          | 672        |
| Grand Total   | 252                                  | 4593 | 0     | 0    | 4845       | 0                                    | 5319 | 45    | 8       | 5372       | 44                         | 0    | 238   | 0    | 282        | 0         | 0    | 0     | 0    | 0          | 10499      |
| Apprch %      | 5.2                                  | 94.8 | 0     | 0    |            | 0                                    | 99   | 0.8   | 0.1     |            | 15.6                       | 0    | 84.4  | 0    |            | 0         | 0    | 0     | 0    |            |            |
| Total %       | 2.4                                  | 43.7 | 0     | 0    | 46.1       | 0                                    | 50.7 | 0.4   | 0.1     | 51.2       | 0.4                        | 0    | 2.3   | 0    | 2.7        | 0         | 0    | 0     | 0    | 0          |            |

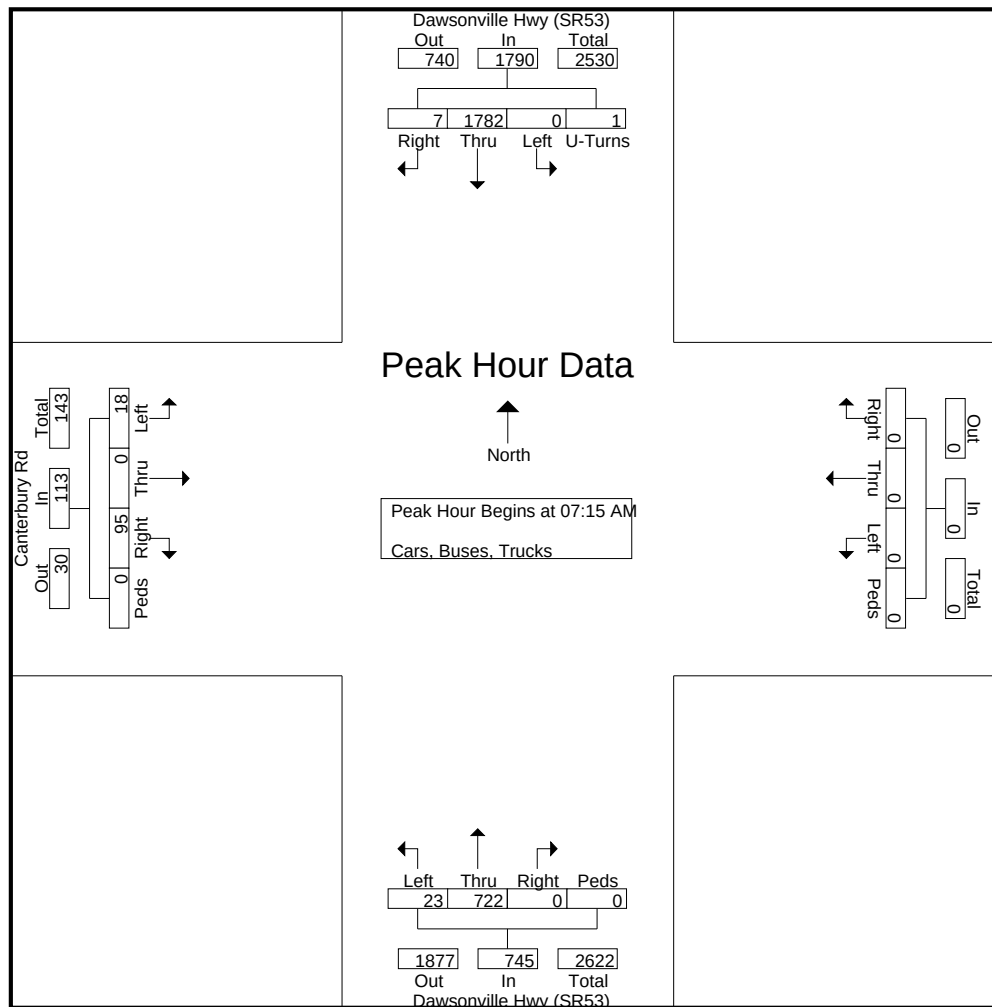
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TMC Data  
Dawsonville Hwy (SR53) @ Canterbury Rd  
Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520004  
Site Code : 39520004  
Start Date : 11/17/2016  
Page No : 2

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |         |            | Canterbury Rd<br>Eastbound |      |       |      |            | Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|---------|------------|----------------------------|------|-------|------|------------|-----------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | U-Turns | App. Total | Left                       | Thru | Right | Peds | App. Total | Left      | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |         |            |                            |      |       |      |            |           |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:15 AM       |                                      |      |       |      |            |                                      |      |       |         |            |                            |      |       |      |            |           |      |       |      |            |            |
| 07:15 AM                                                   | 7                                    | 160  | 0     | 0    | 167        | 0                                    | 456  | 1     | 0       | 457        | 3                          | 0    | 29    | 0    | 32         | 0         | 0    | 0     | 0    | 0          | 656        |
| 07:30 AM                                                   | 6                                    | 168  | 0     | 0    | 174        | 0                                    | 487  | 4     | 0       | 491        | 5                          | 0    | 23    | 0    | 28         | 0         | 0    | 0     | 0    | 0          | 693        |
| 07:45 AM                                                   | 7                                    | 180  | 0     | 0    | 187        | 0                                    | 436  | 1     | 1       | 438        | 4                          | 0    | 27    | 0    | 31         | 0         | 0    | 0     | 0    | 0          | 656        |
| 08:00 AM                                                   | 3                                    | 214  | 0     | 0    | 217        | 0                                    | 403  | 1     | 0       | 404        | 6                          | 0    | 16    | 0    | 22         | 0         | 0    | 0     | 0    | 0          | 643        |
| Total Volume                                               | 23                                   | 722  | 0     | 0    | 745        | 0                                    | 1782 | 7     | 1       | 1790       | 18                         | 0    | 95    | 0    | 113        | 0         | 0    | 0     | 0    | 0          | 2648       |
| % App. Total                                               | 3.1                                  | 96.9 | 0     | 0    |            | 0                                    | 99.6 | 0.4   | 0.1     |            | 15.9                       | 0    | 84.1  | 0    |            | 0         | 0    | 0     | 0    |            |            |
| PHF                                                        | .821                                 | .843 | .000  | .000 | .858       | .000                                 | .915 | .438  | .250    | .911       | .750                       | .000 | .819  | .000 | .883       | .000      | .000 | .000  | .000 | .000       | .955       |



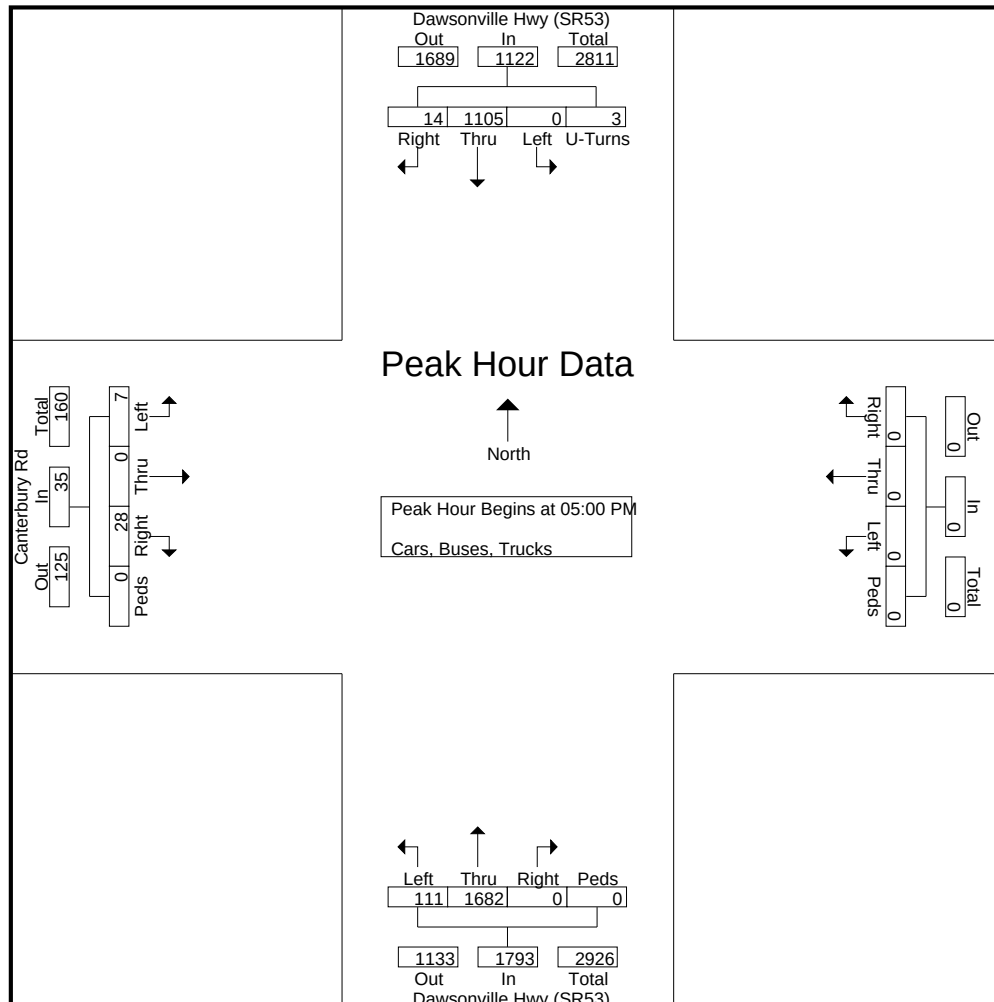
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TMC Data  
Dawsonville Hwy (SR53) @ Canterbury Rd  
Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520004  
Site Code : 39520004  
Start Date : 11/17/2016  
Page No : 3

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |         |            | Canterbury Rd<br>Eastbound |      |       |      |            | Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|---------|------------|----------------------------|------|-------|------|------------|-----------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | U-Turns | App. Total | Left                       | Thru | Right | Peds | App. Total | Left      | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |         |            |                            |      |       |      |            |           |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                                      |      |       |      |            |                                      |      |       |         |            |                            |      |       |      |            |           |      |       |      |            |            |
| 05:00 PM                                                   | 21                                   | 426  | 0     | 0    | 447        | 0                                    | 271  | 1     | 1       | 273        | 3                          | 0    | 8     | 0    | 11         | 0         | 0    | 0     | 0    | 0          | 731        |
| 05:15 PM                                                   | 33                                   | 432  | 0     | 0    | 465        | 0                                    | 278  | 3     | 0       | 281        | 2                          | 0    | 4     | 0    | 6          | 0         | 0    | 0     | 0    | 0          | 752        |
| 05:30 PM                                                   | 26                                   | 418  | 0     | 0    | 444        | 0                                    | 272  | 5     | 0       | 277        | 1                          | 0    | 7     | 0    | 8          | 0         | 0    | 0     | 0    | 0          | 729        |
| 05:45 PM                                                   | 31                                   | 406  | 0     | 0    | 437        | 0                                    | 284  | 5     | 2       | 291        | 1                          | 0    | 9     | 0    | 10         | 0         | 0    | 0     | 0    | 0          | 738        |
| Total Volume                                               | 111                                  | 1682 | 0     | 0    | 1793       | 0                                    | 1105 | 14    | 3       | 1122       | 7                          | 0    | 28    | 0    | 35         | 0         | 0    | 0     | 0    | 0          | 2950       |
| % App. Total                                               | 6.2                                  | 93.8 | 0     | 0    |            | 0                                    | 98.5 | 1.2   | 0.3     |            | 20                         | 0    | 80    | 0    |            | 0         | 0    | 0     | 0    |            |            |
| PHF                                                        | .841                                 | .973 | .000  | .000 | .964       | .000                                 | .973 | .700  | .375    | .964       | .583                       | .000 | .778  | .000 | .795       | .000      | .000 | .000  | .000 | .000       | .981       |



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TMC Data  
Dawsonville Hwy (SR53) @ Ahaluna Dr/  
Lanier Valley Dr, Gainesville, GA  
7-9am I 4.30-6.30pm

File Name : 39520005  
Site Code : 39520005  
Start Date : 11/17/2016  
Page No : 1

## Groups Printed- Cars, Buses, Trucks

|               | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Lanier Valley Dr<br>Eastbound |      |       |      |            | Ahaluna Dr<br>Westbound |      |       |      |            |            |
|---------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|-------------------------|------|-------|------|------------|------------|
| Start Time    | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Left                    | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 8                                    | 146  | 2     | 0    | 156        | 4                                    | 335  | 0     | 0    | 339        | 2                             | 0    | 18    | 0    | 20         | 10                      | 2    | 4     | 0    | 16         | 531        |
| 07:15 AM      | 8                                    | 158  | 3     | 0    | 169        | 4                                    | 461  | 0     | 0    | 465        | 4                             | 0    | 31    | 0    | 35         | 10                      | 1    | 6     | 0    | 17         | 686        |
| 07:30 AM      | 16                                   | 159  | 5     | 0    | 180        | 7                                    | 542  | 0     | 0    | 549        | 5                             | 1    | 32    | 0    | 38         | 13                      | 0    | 5     | 0    | 18         | 785        |
| 07:45 AM      | 17                                   | 173  | 2     | 0    | 192        | 1                                    | 506  | 0     | 0    | 507        | 5                             | 2    | 29    | 0    | 36         | 5                       | 2    | 4     | 0    | 11         | 746        |
| Total         | 49                                   | 636  | 12    | 0    | 697        | 16                                   | 1844 | 0     | 0    | 1860       | 16                            | 3    | 110   | 0    | 129        | 38                      | 5    | 19    | 0    | 62         | 2748       |
| 08:00 AM      | 14                                   | 211  | 1     | 0    | 226        | 2                                    | 392  | 0     | 0    | 394        | 5                             | 2    | 23    | 0    | 30         | 9                       | 0    | 5     | 0    | 14         | 664        |
| 08:15 AM      | 13                                   | 161  | 4     | 0    | 178        | 5                                    | 424  | 0     | 0    | 429        | 3                             | 0    | 17    | 0    | 20         | 5                       | 4    | 3     | 0    | 12         | 639        |
| 08:30 AM      | 13                                   | 176  | 2     | 0    | 191        | 3                                    | 348  | 1     | 0    | 352        | 6                             | 0    | 17    | 0    | 23         | 3                       | 1    | 8     | 0    | 12         | 578        |
| 08:45 AM      | 7                                    | 175  | 1     | 0    | 183        | 3                                    | 312  | 1     | 0    | 316        | 5                             | 1    | 29    | 0    | 35         | 4                       | 1    | 5     | 0    | 10         | 544        |
| Total         | 47                                   | 723  | 8     | 0    | 778        | 13                                   | 1476 | 2     | 0    | 1491       | 19                            | 3    | 86    | 0    | 108        | 21                      | 6    | 21    | 0    | 48         | 2425       |
| *** BREAK *** |                                      |      |       |      |            |                                      |      |       |      |            |                               |      |       |      |            |                         |      |       |      |            |            |
| 04:30 PM      | 23                                   | 377  | 7     | 0    | 407        | 9                                    | 270  | 1     | 0    | 280        | 9                             | 2    | 22    | 0    | 33         | 10                      | 3    | 12    | 0    | 25         | 745        |
| 04:45 PM      | 27                                   | 435  | 6     | 0    | 468        | 4                                    | 293  | 0     | 0    | 297        | 5                             | 0    | 24    | 0    | 29         | 8                       | 1    | 16    | 0    | 25         | 819        |
| Total         | 50                                   | 812  | 13    | 0    | 875        | 13                                   | 563  | 1     | 0    | 577        | 14                            | 2    | 46    | 0    | 62         | 18                      | 4    | 28    | 0    | 50         | 1564       |
| 05:00 PM      | 40                                   | 423  | 7     | 0    | 470        | 4                                    | 270  | 1     | 0    | 275        | 8                             | 0    | 21    | 0    | 29         | 7                       | 0    | 10    | 0    | 17         | 791        |
| 05:15 PM      | 48                                   | 436  | 10    | 0    | 494        | 8                                    | 306  | 0     | 0    | 314        | 5                             | 0    | 23    | 0    | 28         | 8                       | 3    | 14    | 0    | 25         | 861        |
| 05:30 PM      | 39                                   | 432  | 12    | 0    | 483        | 4                                    | 316  | 0     | 0    | 320        | 3                             | 0    | 25    | 0    | 28         | 14                      | 2    | 12    | 0    | 28         | 859        |
| 05:45 PM      | 52                                   | 446  | 9     | 0    | 507        | 6                                    | 309  | 2     | 0    | 317        | 5                             | 1    | 27    | 0    | 33         | 8                       | 2    | 15    | 0    | 25         | 882        |
| Total         | 179                                  | 1737 | 38    | 0    | 1954       | 22                                   | 1201 | 3     | 0    | 1226       | 21                            | 1    | 96    | 0    | 118        | 37                      | 7    | 51    | 0    | 95         | 3393       |
| 06:00 PM      | 38                                   | 392  | 6     | 0    | 436        | 6                                    | 247  | 2     | 0    | 255        | 2                             | 0    | 17    | 0    | 19         | 8                       | 1    | 17    | 0    | 26         | 736        |
| 06:15 PM      | 40                                   | 386  | 8     | 0    | 434        | 9                                    | 278  | 2     | 0    | 289        | 3                             | 0    | 17    | 0    | 20         | 9                       | 1    | 9     | 0    | 19         | 762        |
| Grand Total   | 403                                  | 4686 | 85    | 0    | 5174       | 79                                   | 5609 | 10    | 0    | 5698       | 75                            | 9    | 372   | 0    | 456        | 131                     | 24   | 145   | 0    | 300        | 11628      |
| Apprch %      | 7.8                                  | 90.6 | 1.6   | 0    |            | 1.4                                  | 98.4 | 0.2   | 0    |            | 16.4                          | 2    | 81.6  | 0    |            | 43.7                    | 8    | 48.3  | 0    |            |            |
| Total %       | 3.5                                  | 40.3 | 0.7   | 0    | 44.5       | 0.7                                  | 48.2 | 0.1   | 0    | 49         | 0.6                           | 0.1  | 3.2   | 0    | 3.9        | 1.1                     | 0.2  | 1.2   | 0    | 2.6        |            |

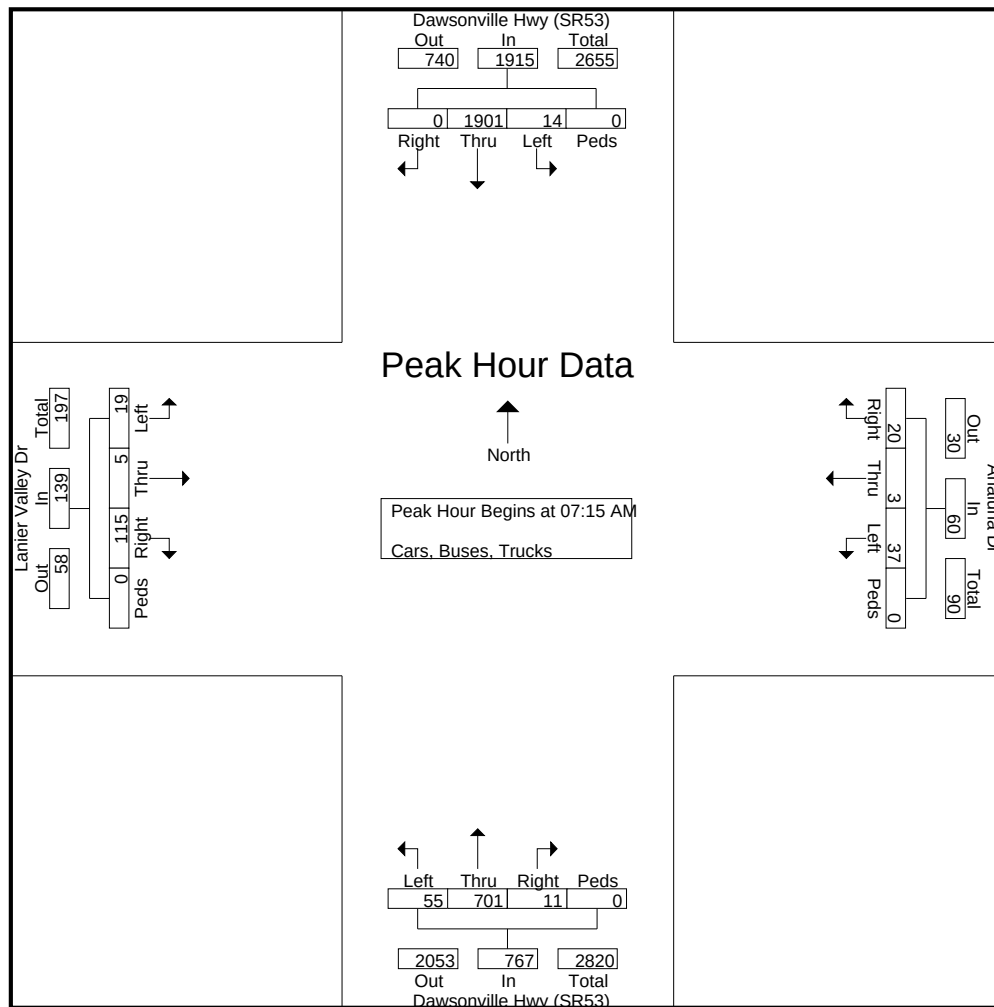
# Reliable Traffic Data Services, LLC

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TMC Data  
Dawsonville Hwy (SR53) @ Ahaluna Dr/  
Lanier Valley Dr, Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520005  
Site Code : 39520005  
Start Date : 11/17/2016  
Page No : 2

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Lanier Valley Dr<br>Eastbound |      |       |      |            | Ahaluna Dr<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|-------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Left                    | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                               |      |       |      |            |                         |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:15 AM       |                                      |      |       |      |            |                                      |      |       |      |            |                               |      |       |      |            |                         |      |       |      |            |            |
| 07:15 AM                                                   | 8                                    | 158  | 3     | 0    | 169        | 4                                    | 461  | 0     | 0    | 465        | 4                             | 0    | 31    | 0    | 35         | 10                      | 1    | 6     | 0    | 17         | 686        |
| 07:30 AM                                                   | 16                                   | 159  | 5     | 0    | 180        | 7                                    | 542  | 0     | 0    | 549        | 5                             | 1    | 32    | 0    | 38         | 13                      | 0    | 5     | 0    | 18         | 785        |
| 07:45 AM                                                   | 17                                   | 173  | 2     | 0    | 192        | 1                                    | 506  | 0     | 0    | 507        | 5                             | 2    | 29    | 0    | 36         | 5                       | 2    | 4     | 0    | 11         | 746        |
| 08:00 AM                                                   | 14                                   | 211  | 1     | 0    | 226        | 2                                    | 392  | 0     | 0    | 394        | 5                             | 2    | 23    | 0    | 30         | 9                       | 0    | 5     | 0    | 14         | 664        |
| Total Volume                                               | 55                                   | 701  | 11    | 0    | 767        | 14                                   | 1901 | 0     | 0    | 1915       | 19                            | 5    | 115   | 0    | 139        | 37                      | 3    | 20    | 0    | 60         | 2881       |
| % App. Total                                               | 7.2                                  | 91.4 | 1.4   | 0    |            | 0.7                                  | 99.3 | 0     | 0    |            | 13.7                          | 3.6  | 82.7  | 0    |            | 61.7                    | 5    | 33.3  | 0    |            |            |
| PHF                                                        | .809                                 | .831 | .550  | .000 | .848       | .500                                 | .877 | .000  | .000 | .872       | .950                          | .625 | .898  | .000 | .914       | .712                    | .375 | .833  | .000 | .833       | .918       |



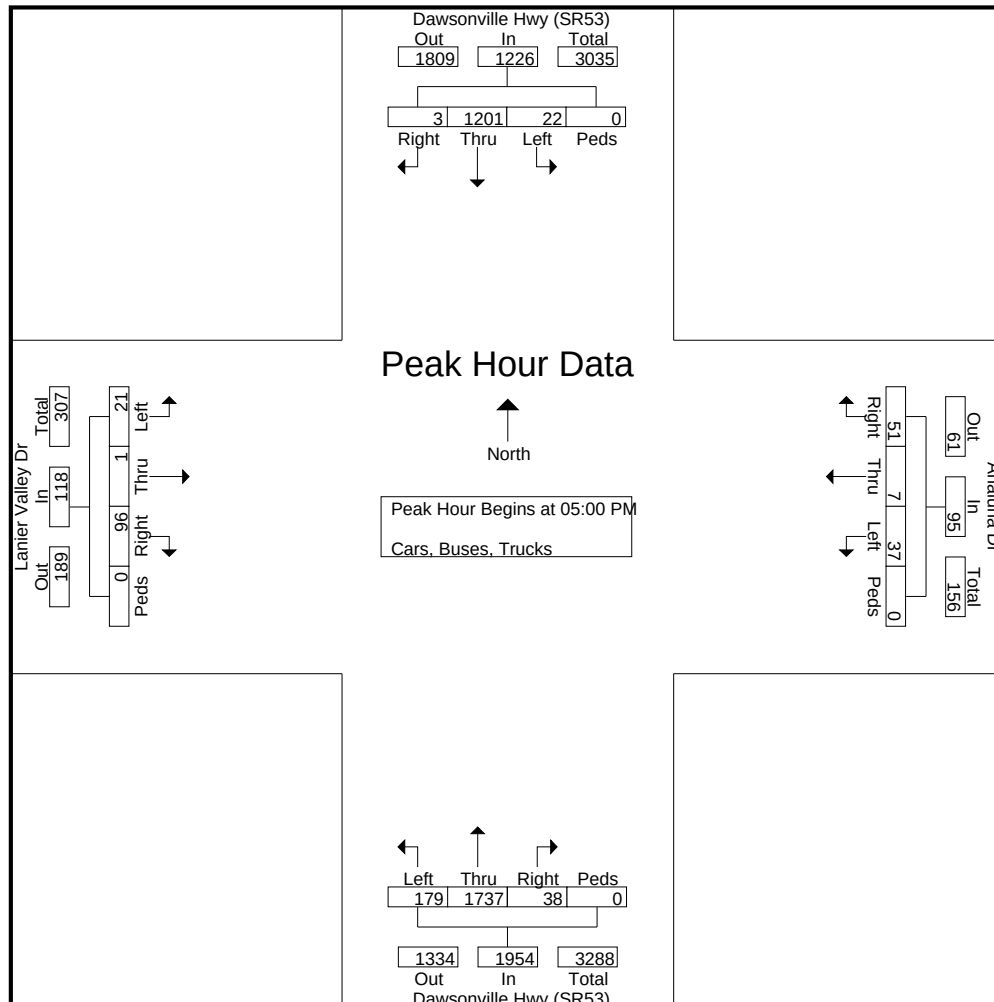
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TMC Data  
Dawsonville Hwy (SR53) @ Ahaluna Dr/  
Lanier Valley Dr, Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520005  
Site Code : 39520005  
Start Date : 11/17/2016  
Page No : 3

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Lanier Valley Dr<br>Eastbound |      |       |      |            | Ahaluna Dr<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|-------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Left                    | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                               |      |       |      |            |                         |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                                      |      |       |      |            |                                      |      |       |      |            |                               |      |       |      |            |                         |      |       |      |            |            |
| 05:00 PM                                                   | 40                                   | 423  | 7     | 0    | 470        | 4                                    | 270  | 1     | 0    | 275        | 8                             | 0    | 21    | 0    | 29         | 7                       | 0    | 10    | 0    | 17         | 791        |
| 05:15 PM                                                   | 48                                   | 436  | 10    | 0    | 494        | 8                                    | 306  | 0     | 0    | 314        | 5                             | 0    | 23    | 0    | 28         | 8                       | 3    | 14    | 0    | 25         | 861        |
| 05:30 PM                                                   | 39                                   | 432  | 12    | 0    | 483        | 4                                    | 316  | 0     | 0    | 320        | 3                             | 0    | 25    | 0    | 28         | 14                      | 2    | 12    | 0    | 28         | 859        |
| 05:45 PM                                                   | 52                                   | 446  | 9     | 0    | 507        | 6                                    | 309  | 2     | 0    | 317        | 5                             | 1    | 27    | 0    | 33         | 8                       | 2    | 15    | 0    | 25         | 882        |
| Total Volume                                               | 179                                  | 1737 | 38    | 0    | 1954       | 22                                   | 1201 | 3     | 0    | 1226       | 21                            | 1    | 96    | 0    | 118        | 37                      | 7    | 51    | 0    | 95         | 3393       |
| % App. Total                                               | 9.2                                  | 88.9 | 1.9   | 0    |            | 1.8                                  | 98   | 0.2   | 0    |            | 17.8                          | 0.8  | 81.4  | 0    |            | 38.9                    | 7.4  | 53.7  | 0    |            |            |
| PHF                                                        | .861                                 | .974 | .792  | .000 | .964       | .688                                 | .950 | .375  | .000 | .958       | .656                          | .250 | .889  | .000 | .894       | .661                    | .583 | .850  | .000 | .848       | .962       |





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TMC Data  
Dawsonville Hwy (SR53) @ North Lake  
Square Shopp Ctr Drwy, Gainesville, GA  
7-9am I 4-6pm

File Name : 40160001  
Site Code : 40160001  
Start Date : 3/22/2017  
Page No : 1

## Groups Printed- Cars, Buses, Trucks

|               | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Olive Garden/others Drwy<br>Eastbound |      |       |      |            | North Lake Square<br>Shopp Ctr Drwy<br>Westbound |      |       |      |            |            |
|---------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|---------------------------------------|------|-------|------|------------|--------------------------------------------------|------|-------|------|------------|------------|
| Start Time    | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                                  | Thru | Right | Peds | App. Total | Left                                             | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 1                                    | 155  | 4     | 0    | 160        | 1                                    | 367  | 0     | 0    | 368        | 1                                     | 0    | 1     | 0    | 2          | 0                                                | 0    | 0     | 0    | 0          | 530        |
| 07:15 AM      | 1                                    | 163  | 1     | 0    | 165        | 0                                    | 489  | 0     | 0    | 489        | 1                                     | 0    | 1     | 0    | 2          | 0                                                | 0    | 0     | 0    | 0          | 656        |
| 07:30 AM      | 4                                    | 174  | 1     | 0    | 179        | 1                                    | 552  | 0     | 0    | 553        | 1                                     | 0    | 2     | 0    | 3          | 0                                                | 0    | 0     | 0    | 0          | 735        |
| 07:45 AM      | 2                                    | 189  | 3     | 0    | 194        | 1                                    | 536  | 3     | 0    | 540        | 0                                     | 0    | 1     | 0    | 1          | 1                                                | 0    | 0     | 0    | 1          | 736        |
| Total         | 8                                    | 681  | 9     | 0    | 698        | 3                                    | 1944 | 3     | 0    | 1950       | 3                                     | 0    | 5     | 0    | 8          | 1                                                | 0    | 0     | 0    | 1          | 2657       |
| 08:00 AM      | 4                                    | 214  | 4     | 0    | 222        | 3                                    | 412  | 1     | 0    | 416        | 0                                     | 0    | 2     | 0    | 2          | 1                                                | 0    | 0     | 0    | 1          | 641        |
| 08:15 AM      | 2                                    | 206  | 2     | 0    | 210        | 1                                    | 429  | 3     | 0    | 433        | 1                                     | 0    | 1     | 0    | 2          | 0                                                | 0    | 0     | 0    | 0          | 645        |
| 08:30 AM      | 0                                    | 197  | 7     | 0    | 204        | 1                                    | 358  | 0     | 0    | 359        | 0                                     | 0    | 0     | 0    | 0          | 3                                                | 0    | 1     | 0    | 4          | 567        |
| 08:45 AM      | 3                                    | 185  | 8     | 0    | 196        | 1                                    | 337  | 1     | 0    | 339        | 0                                     | 0    | 3     | 0    | 3          | 3                                                | 0    | 2     | 0    | 5          | 543        |
| Total         | 9                                    | 802  | 21    | 0    | 832        | 6                                    | 1536 | 5     | 0    | 1547       | 1                                     | 0    | 6     | 0    | 7          | 7                                                | 0    | 3     | 0    | 10         | 2396       |
| *** BREAK *** |                                      |      |       |      |            |                                      |      |       |      |            |                                       |      |       |      |            |                                                  |      |       |      |            |            |
| 04:00 PM      | 12                                   | 376  | 29    | 0    | 417        | 7                                    | 274  | 2     | 0    | 283        | 1                                     | 1    | 12    | 0    | 14         | 28                                               | 0    | 9     | 0    | 37         | 751        |
| 04:15 PM      | 11                                   | 382  | 30    | 0    | 423        | 11                                   | 277  | 4     | 0    | 292        | 2                                     | 0    | 15    | 0    | 17         | 48                                               | 0    | 8     | 0    | 56         | 788        |
| 04:30 PM      | 19                                   | 396  | 38    | 0    | 453        | 8                                    | 285  | 5     | 0    | 298        | 2                                     | 2    | 6     | 0    | 10         | 30                                               | 0    | 11    | 0    | 41         | 802        |
| 04:45 PM      | 22                                   | 435  | 32    | 0    | 489        | 6                                    | 287  | 5     | 0    | 298        | 7                                     | 0    | 16    | 0    | 23         | 32                                               | 2    | 10    | 0    | 44         | 854        |
| Total         | 64                                   | 1589 | 129   | 0    | 1782       | 32                                   | 1123 | 16    | 0    | 1171       | 12                                    | 3    | 49    | 0    | 64         | 138                                              | 2    | 38    | 0    | 178        | 3195       |
| 05:00 PM      | 28                                   | 433  | 39    | 0    | 500        | 1                                    | 287  | 5     | 0    | 293        | 4                                     | 1    | 14    | 0    | 19         | 25                                               | 1    | 5     | 0    | 31         | 843        |
| 05:15 PM      | 18                                   | 439  | 24    | 0    | 481        | 6                                    | 296  | 7     | 0    | 309        | 3                                     | 2    | 12    | 0    | 17         | 31                                               | 2    | 11    | 0    | 44         | 851        |
| 05:30 PM      | 16                                   | 447  | 37    | 0    | 500        | 4                                    | 312  | 6     | 0    | 322        | 1                                     | 0    | 19    | 0    | 20         | 35                                               | 3    | 14    | 0    | 52         | 894        |
| 05:45 PM      | 25                                   | 444  | 38    | 0    | 507        | 8                                    | 304  | 9     | 0    | 321        | 5                                     | 0    | 15    | 0    | 20         | 27                                               | 1    | 12    | 0    | 40         | 888        |
| Total         | 87                                   | 1763 | 138   | 0    | 1988       | 19                                   | 1199 | 27    | 0    | 1245       | 13                                    | 3    | 60    | 0    | 76         | 118                                              | 7    | 42    | 0    | 167        | 3476       |
| Grand Total   | 168                                  | 4835 | 297   | 0    | 5300       | 60                                   | 5802 | 51    | 0    | 5913       | 29                                    | 6    | 120   | 0    | 155        | 264                                              | 9    | 83    | 0    | 356        | 11724      |
| Apprch %      | 3.2                                  | 91.2 | 5.6   | 0    |            | 1                                    | 98.1 | 0.9   | 0    |            | 18.7                                  | 3.9  | 77.4  | 0    |            | 74.2                                             | 2.5  | 23.3  | 0    |            |            |
| Total %       | 1.4                                  | 41.2 | 2.5   | 0    | 45.2       | 0.5                                  | 49.5 | 0.4   | 0    | 50.4       | 0.2                                   | 0.1  | 1     | 0    | 1.3        | 2.3                                              | 0.1  | 0.7   | 0    | 3          |            |

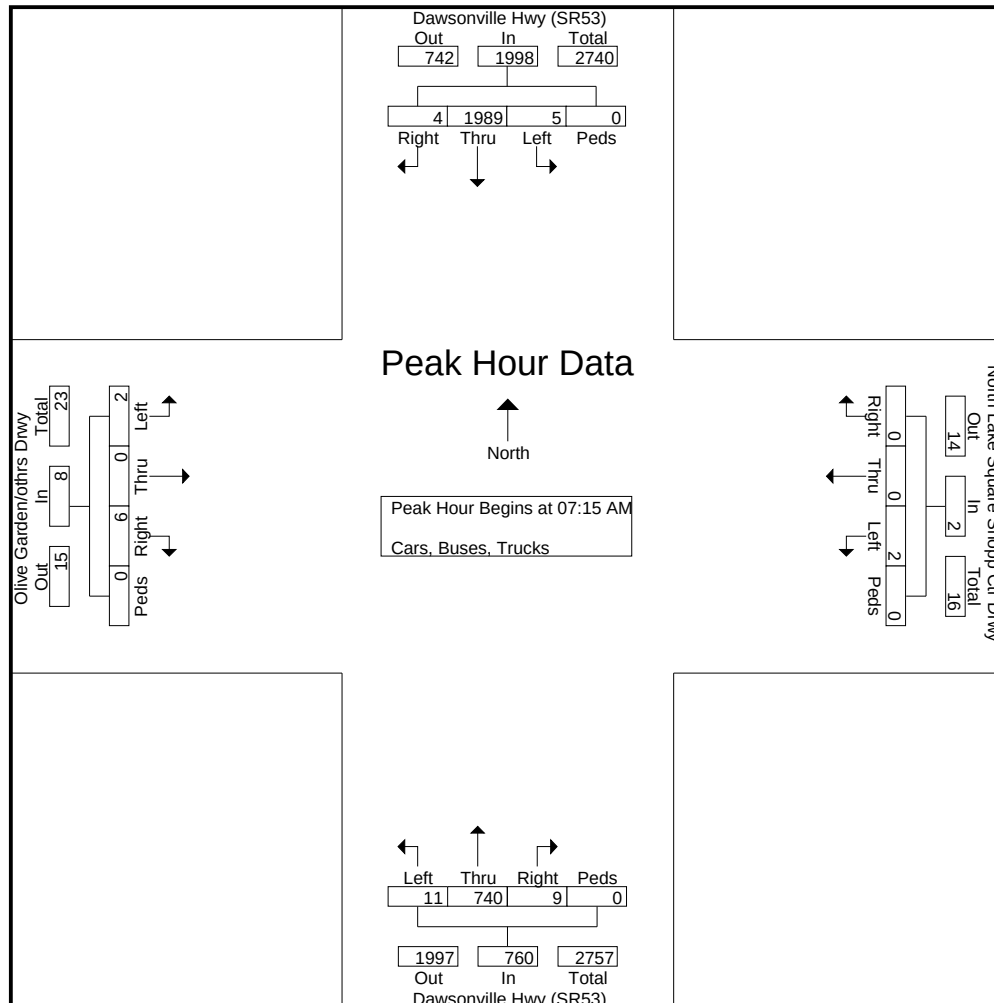
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TMC Data  
Dawsonville Hwy (SR53) @ North Lake  
Square Shopp Ctr Drwy, Gainesville, GA  
7-9am I 4-6pm

File Name : 40160001  
Site Code : 40160001  
Start Date : 3/22/2017  
Page No : 2

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Olive Garden/others Drwy<br>Eastbound |      |       |      |            | North Lake Square<br>Shopp Ctr Drwy<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|---------------------------------------|------|-------|------|------------|--------------------------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                                  | Thru | Right | Peds | App. Total | Left                                             | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                                       |      |       |      |            |                                                  |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:15 AM       |                                      |      |       |      |            |                                      |      |       |      |            |                                       |      |       |      |            |                                                  |      |       |      |            |            |
| 07:15 AM                                                   | 1                                    | 163  | 1     | 0    | 165        | 0                                    | 489  | 0     | 0    | 489        | 1                                     | 0    | 1     | 0    | 2          | 0                                                | 0    | 0     | 0    | 0          | 656        |
| 07:30 AM                                                   | 4                                    | 174  | 1     | 0    | 179        | 1                                    | 552  | 0     | 0    | 553        | 1                                     | 0    | 2     | 0    | 3          | 0                                                | 0    | 0     | 0    | 0          | 735        |
| 07:45 AM                                                   | 2                                    | 189  | 3     | 0    | 194        | 1                                    | 536  | 3     | 0    | 540        | 0                                     | 0    | 1     | 0    | 1          | 1                                                | 0    | 0     | 0    | 1          | 736        |
| 08:00 AM                                                   | 4                                    | 214  | 4     | 0    | 222        | 3                                    | 412  | 1     | 0    | 416        | 0                                     | 0    | 2     | 0    | 2          | 1                                                | 0    | 0     | 0    | 1          | 641        |
| Total Volume                                               | 11                                   | 740  | 9     | 0    | 760        | 5                                    | 1989 | 4     | 0    | 1998       | 2                                     | 0    | 6     | 0    | 8          | 2                                                | 0    | 0     | 0    | 2          | 2768       |
| % App. Total                                               | 1.4                                  | 97.4 | 1.2   | 0    |            | 0.3                                  | 99.5 | 0.2   | 0    |            | 25                                    | 0    | 75    | 0    |            | 100                                              | 0    | 0     | 0    |            |            |
| PHF                                                        | .688                                 | .864 | .563  | .000 | .856       | .417                                 | .901 | .333  | .000 | .903       | .500                                  | .000 | .750  | .000 | .667       | .500                                             | .000 | .000  | .000 | .500       | .940       |



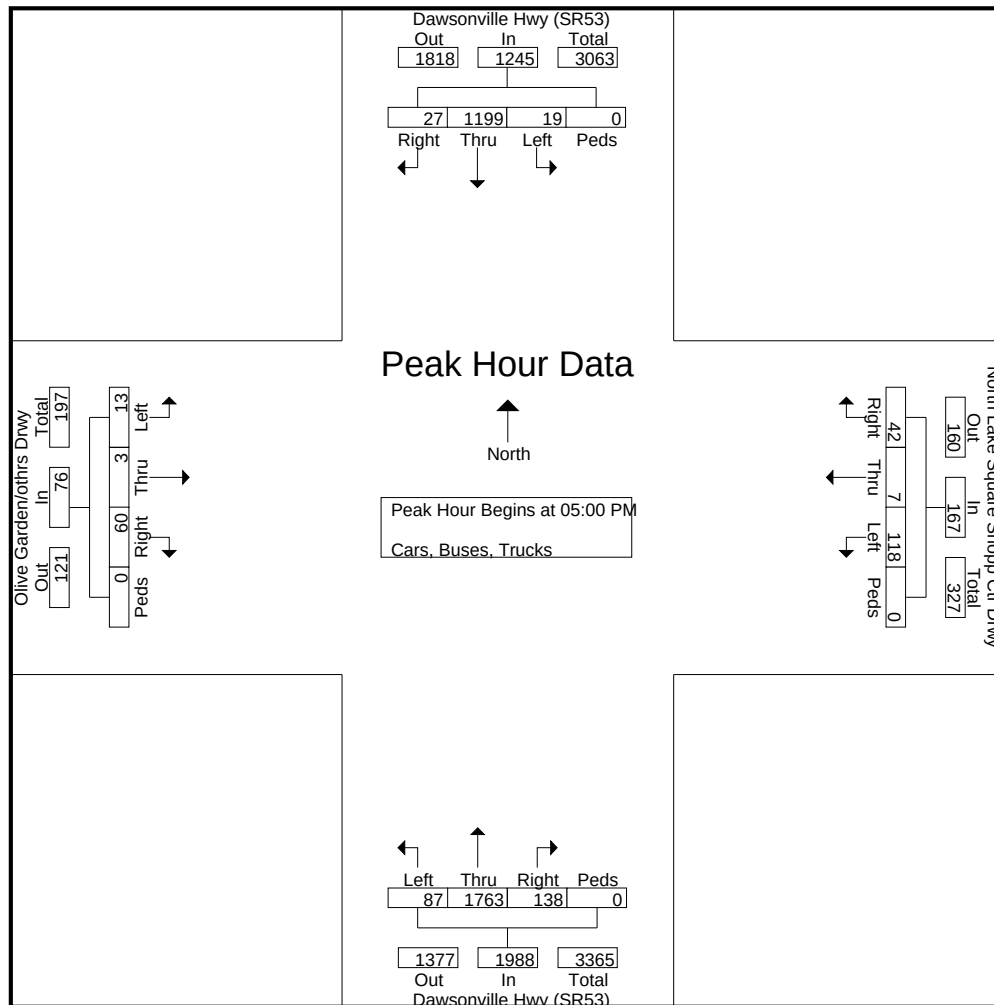
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TMC Data  
Dawsonville Hwy (SR53) @ North Lake  
Square Shopp Ctr Drwy, Gainesville, GA  
7-9am I 4-6pm

File Name : 40160001  
Site Code : 40160001  
Start Date : 3/22/2017  
Page No : 3

|                                                            | Dawsonville Hwy (SR53) Northbound |      |       |      |            | Dawsonville Hwy (SR53) Southbound |      |       |      |            | Olive Garden/others Drwy Eastbound |      |       |      |            | North Lake Square Shopp Ctr Drwy Westbound |      |       |      |            |            |
|------------------------------------------------------------|-----------------------------------|------|-------|------|------------|-----------------------------------|------|-------|------|------------|------------------------------------|------|-------|------|------------|--------------------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                              | Thru | Right | Peds | App. Total | Left                              | Thru | Right | Peds | App. Total | Left                               | Thru | Right | Peds | App. Total | Left                                       | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                                   |      |       |      |            |                                   |      |       |      |            |                                    |      |       |      |            |                                            |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                                   |      |       |      |            |                                   |      |       |      |            |                                    |      |       |      |            |                                            |      |       |      |            |            |
| 05:00 PM                                                   | 28                                | 433  | 39    | 0    | 500        | 1                                 | 287  | 5     | 0    | 293        | 4                                  | 1    | 14    | 0    | 19         | 25                                         | 1    | 5     | 0    | 31         | 843        |
| 05:15 PM                                                   | 18                                | 439  | 24    | 0    | 481        | 6                                 | 296  | 7     | 0    | 309        | 3                                  | 2    | 12    | 0    | 17         | 31                                         | 2    | 11    | 0    | 44         | 851        |
| 05:30 PM                                                   | 16                                | 447  | 37    | 0    | 500        | 4                                 | 312  | 6     | 0    | 322        | 1                                  | 0    | 19    | 0    | 20         | 35                                         | 3    | 14    | 0    | 52         | 894        |
| 05:45 PM                                                   | 25                                | 444  | 38    | 0    | 507        | 8                                 | 304  | 9     | 0    | 321        | 5                                  | 0    | 15    | 0    | 20         | 27                                         | 1    | 12    | 0    | 40         | 888        |
| Total Volume                                               | 87                                | 1763 | 138   | 0    | 1988       | 19                                | 1199 | 27    | 0    | 1245       | 13                                 | 3    | 60    | 0    | 76         | 118                                        | 7    | 42    | 0    | 167        | 3476       |
| % App. Total                                               | 4.4                               | 88.7 | 6.9   | 0    |            | 1.5                               | 96.3 | 2.2   | 0    |            | 17.1                               | 3.9  | 78.9  | 0    |            | 70.7                                       | 4.2  | 25.1  | 0    |            |            |
| PHF                                                        | .777                              | .986 | .885  | .000 | .980       | .594                              | .961 | .750  | .000 | .967       | .650                               | .375 | .789  | .000 | .950       | .843                                       | .583 | .750  | .000 | .803       | .972       |



# Reliable Traffic Data Services, LLC

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TMC Data  
Dawsonville Hwy (SR53) @ Beechwood Blvd  
Gainesville, GA  
7-9am I 4.30-6.30pm

File Name : 39520006  
Site Code : 39520006  
Start Date : 11/17/2016  
Page No : 1

## Groups Printed- Cars, Buses, Trucks

|               | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Beechwood Blvd<br>Eastbound |      |       |      |            | Commercial Drwy<br>(Closed)<br>Westbound |      |       |      |            |            |
|---------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|-----------------------------|------|-------|------|------------|------------------------------------------|------|-------|------|------------|------------|
| Start Time    | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                        | Thru | Right | Peds | App. Total | Left                                     | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 2                                    | 167  | 0     | 0    | 169        | 0                                    | 367  | 2     | 0    | 369        | 1                           | 0    | 10    | 0    | 11         | 0                                        | 0    | 0     | 0    | 0          | 549        |
| 07:15 AM      | 6                                    | 172  | 0     | 0    | 178        | 0                                    | 492  | 1     | 0    | 493        | 1                           | 0    | 9     | 0    | 10         | 0                                        | 0    | 0     | 0    | 0          | 681        |
| 07:30 AM      | 8                                    | 187  | 0     | 0    | 195        | 0                                    | 564  | 0     | 0    | 564        | 0                           | 0    | 12    | 0    | 12         | 0                                        | 0    | 0     | 0    | 0          | 771        |
| 07:45 AM      | 5                                    | 203  | 0     | 0    | 208        | 0                                    | 535  | 1     | 0    | 536        | 3                           | 0    | 11    | 0    | 14         | 0                                        | 0    | 0     | 0    | 0          | 758        |
| Total         | 21                                   | 729  | 0     | 0    | 750        | 0                                    | 1958 | 4     | 0    | 1962       | 5                           | 0    | 42    | 0    | 47         | 0                                        | 0    | 0     | 0    | 0          | 2759       |
|               |                                      |      |       |      |            |                                      |      |       |      |            |                             |      |       |      |            |                                          |      |       |      |            |            |
| 08:00 AM      | 8                                    | 225  | 0     | 0    | 233        | 0                                    | 415  | 0     | 0    | 415        | 1                           | 0    | 9     | 0    | 10         | 0                                        | 0    | 0     | 0    | 0          | 658        |
| 08:15 AM      | 5                                    | 203  | 0     | 0    | 208        | 0                                    | 441  | 0     | 0    | 441        | 0                           | 0    | 3     | 0    | 3          | 0                                        | 0    | 0     | 0    | 0          | 652        |
| 08:30 AM      | 3                                    | 198  | 0     | 0    | 201        | 0                                    | 365  | 2     | 0    | 367        | 0                           | 0    | 11    | 0    | 11         | 0                                        | 0    | 0     | 0    | 0          | 579        |
| 08:45 AM      | 3                                    | 192  | 0     | 0    | 195        | 0                                    | 341  | 1     | 0    | 342        | 1                           | 0    | 3     | 0    | 4          | 0                                        | 0    | 0     | 0    | 0          | 541        |
| Total         | 19                                   | 818  | 0     | 0    | 837        | 0                                    | 1562 | 3     | 0    | 1565       | 2                           | 0    | 26    | 0    | 28         | 0                                        | 0    | 0     | 0    | 0          | 2430       |
| *** BREAK *** |                                      |      |       |      |            |                                      |      |       |      |            |                             |      |       |      |            |                                          |      |       |      |            |            |
|               |                                      |      |       |      |            |                                      |      |       |      |            |                             |      |       |      |            |                                          |      |       |      |            |            |
| 04:30 PM      | 16                                   | 443  | 0     | 0    | 459        | 0                                    | 312  | 1     | 0    | 313        | 0                           | 0    | 14    | 0    | 14         | 0                                        | 0    | 0     | 0    | 0          | 786        |
| 04:45 PM      | 15                                   | 497  | 0     | 0    | 512        | 0                                    | 327  | 0     | 0    | 327        | 0                           | 0    | 9     | 0    | 9          | 0                                        | 0    | 0     | 0    | 0          | 848        |
| Total         | 31                                   | 940  | 0     | 0    | 971        | 0                                    | 639  | 1     | 0    | 640        | 0                           | 0    | 23    | 0    | 23         | 0                                        | 0    | 0     | 0    | 0          | 1634       |
|               |                                      |      |       |      |            |                                      |      |       |      |            |                             |      |       |      |            |                                          |      |       |      |            |            |
| 05:00 PM      | 18                                   | 488  | 0     | 0    | 506        | 0                                    | 347  | 0     | 0    | 347        | 0                           | 0    | 5     | 0    | 5          | 0                                        | 0    | 0     | 0    | 0          | 858        |
| 05:15 PM      | 20                                   | 506  | 0     | 0    | 526        | 0                                    | 354  | 3     | 0    | 357        | 0                           | 0    | 17    | 0    | 17         | 0                                        | 0    | 0     | 0    | 0          | 900        |
| 05:30 PM      | 31                                   | 494  | 0     | 0    | 525        | 0                                    | 346  | 0     | 0    | 346        | 0                           | 0    | 10    | 0    | 10         | 0                                        | 0    | 0     | 0    | 0          | 881        |
| 05:45 PM      | 17                                   | 510  | 0     | 0    | 527        | 0                                    | 341  | 6     | 0    | 347        | 1                           | 0    | 15    | 0    | 16         | 0                                        | 0    | 0     | 0    | 0          | 890        |
| Total         | 86                                   | 1998 | 0     | 0    | 2084       | 0                                    | 1388 | 9     | 0    | 1397       | 1                           | 0    | 47    | 0    | 48         | 0                                        | 0    | 0     | 0    | 0          | 3529       |
|               |                                      |      |       |      |            |                                      |      |       |      |            |                             |      |       |      |            |                                          |      |       |      |            |            |
| 06:00 PM      | 23                                   | 484  | 0     | 0    | 507        | 0                                    | 338  | 1     | 0    | 339        | 1                           | 0    | 9     | 0    | 10         | 0                                        | 0    | 0     | 0    | 0          | 856        |
| 06:15 PM      | 19                                   | 468  | 0     | 0    | 487        | 0                                    | 323  | 2     | 0    | 325        | 1                           | 0    | 14    | 0    | 15         | 0                                        | 0    | 0     | 0    | 0          | 827        |
| Grand Total   | 199                                  | 5437 | 0     | 0    | 5636       | 0                                    | 6208 | 20    | 0    | 6228       | 10                          | 0    | 161   | 0    | 171        | 0                                        | 0    | 0     | 0    | 0          | 12035      |
| Apprch %      | 3.5                                  | 96.5 | 0     | 0    |            | 0                                    | 99.7 | 0.3   | 0    |            | 5.8                         | 0    | 94.2  | 0    |            | 0                                        | 0    | 0     | 0    | 0          |            |
| Total %       | 1.7                                  | 45.2 | 0     | 0    | 46.8       | 0                                    | 51.6 | 0.2   | 0    | 51.7       | 0.1                         | 0    | 1.3   | 0    | 1.4        | 0                                        | 0    | 0     | 0    | 0          |            |

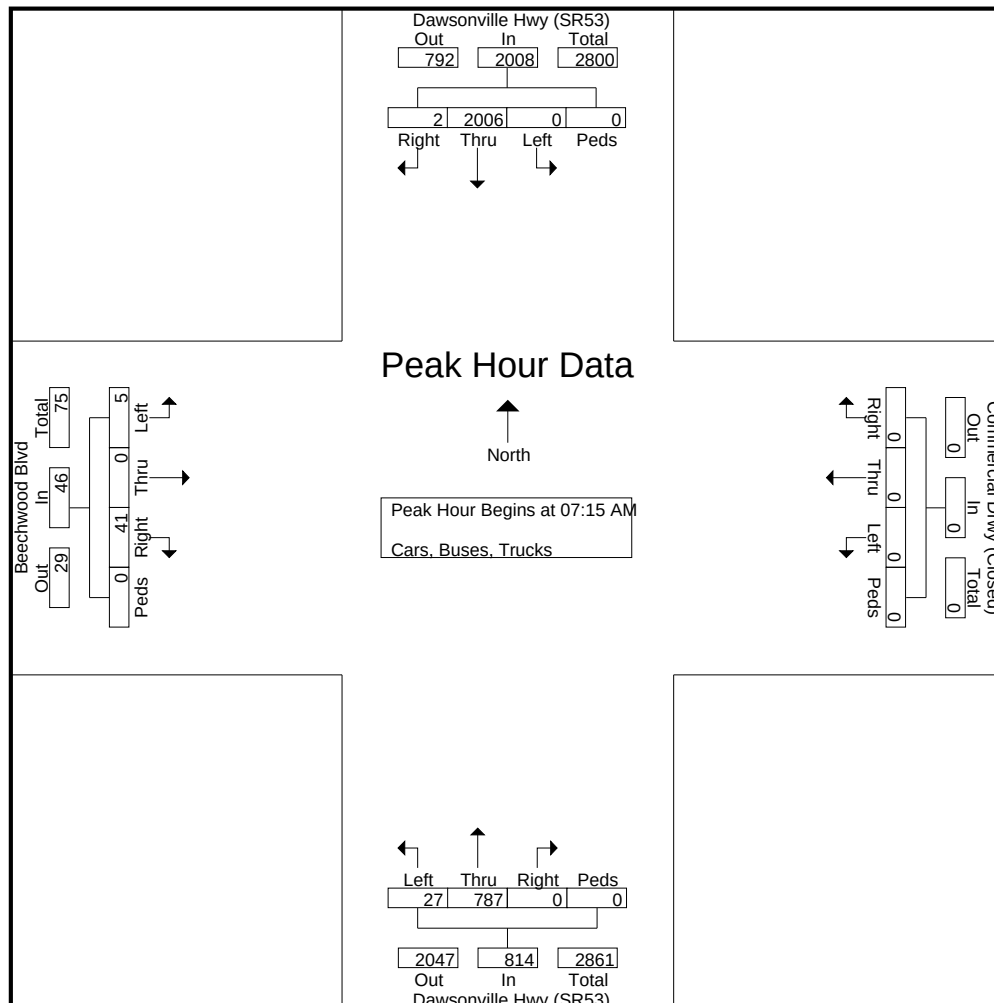
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TMC Data  
Dawsonville Hwy (SR53) @ Beechwood Blvd  
Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520006  
Site Code : 39520006  
Start Date : 11/17/2016  
Page No : 2

|                                                            | Dawsonville Hwy (SR53) Northbound |      |       |      |            | Dawsonville Hwy (SR53) Southbound |      |       |      |            | Beechwood Blvd Eastbound |      |       |      |            | Commercial Drwy (Closed) Westbound |      |       |      |            |            |
|------------------------------------------------------------|-----------------------------------|------|-------|------|------------|-----------------------------------|------|-------|------|------------|--------------------------|------|-------|------|------------|------------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                              | Thru | Right | Peds | App. Total | Left                              | Thru | Right | Peds | App. Total | Left                     | Thru | Right | Peds | App. Total | Left                               | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                                   |      |       |      |            |                                   |      |       |      |            |                          |      |       |      |            |                                    |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:15 AM       |                                   |      |       |      |            |                                   |      |       |      |            |                          |      |       |      |            |                                    |      |       |      |            |            |
| 07:15 AM                                                   | 6                                 | 172  | 0     | 0    | 178        | 0                                 | 492  | 1     | 0    | 493        | 1                        | 0    | 9     | 0    | 10         | 0                                  | 0    | 0     | 0    | 0          | 681        |
| 07:30 AM                                                   | 8                                 | 187  | 0     | 0    | 195        | 0                                 | 564  | 0     | 0    | 564        | 0                        | 0    | 12    | 0    | 12         | 0                                  | 0    | 0     | 0    | 0          | 771        |
| 07:45 AM                                                   | 5                                 | 203  | 0     | 0    | 208        | 0                                 | 535  | 1     | 0    | 536        | 3                        | 0    | 11    | 0    | 14         | 0                                  | 0    | 0     | 0    | 0          | 758        |
| 08:00 AM                                                   | 8                                 | 225  | 0     | 0    | 233        | 0                                 | 415  | 0     | 0    | 415        | 1                        | 0    | 9     | 0    | 10         | 0                                  | 0    | 0     | 0    | 0          | 658        |
| Total Volume                                               | 27                                | 787  | 0     | 0    | 814        | 0                                 | 2006 | 2     | 0    | 2008       | 5                        | 0    | 41    | 0    | 46         | 0                                  | 0    | 0     | 0    | 0          | 2868       |
| % App. Total                                               | 3.3                               | 96.7 | 0     | 0    |            | 0                                 | 99.9 | 0.1   | 0    |            | 10.9                     | 0    | 89.1  | 0    |            | 0                                  | 0    | 0     | 0    |            |            |
| PHF                                                        | .844                              | .874 | .000  | .000 | .873       | .000                              | .889 | .500  | .000 | .890       | .417                     | .000 | .854  | .000 | .821       | .000                               | .000 | .000  | .000 | .000       | .930       |



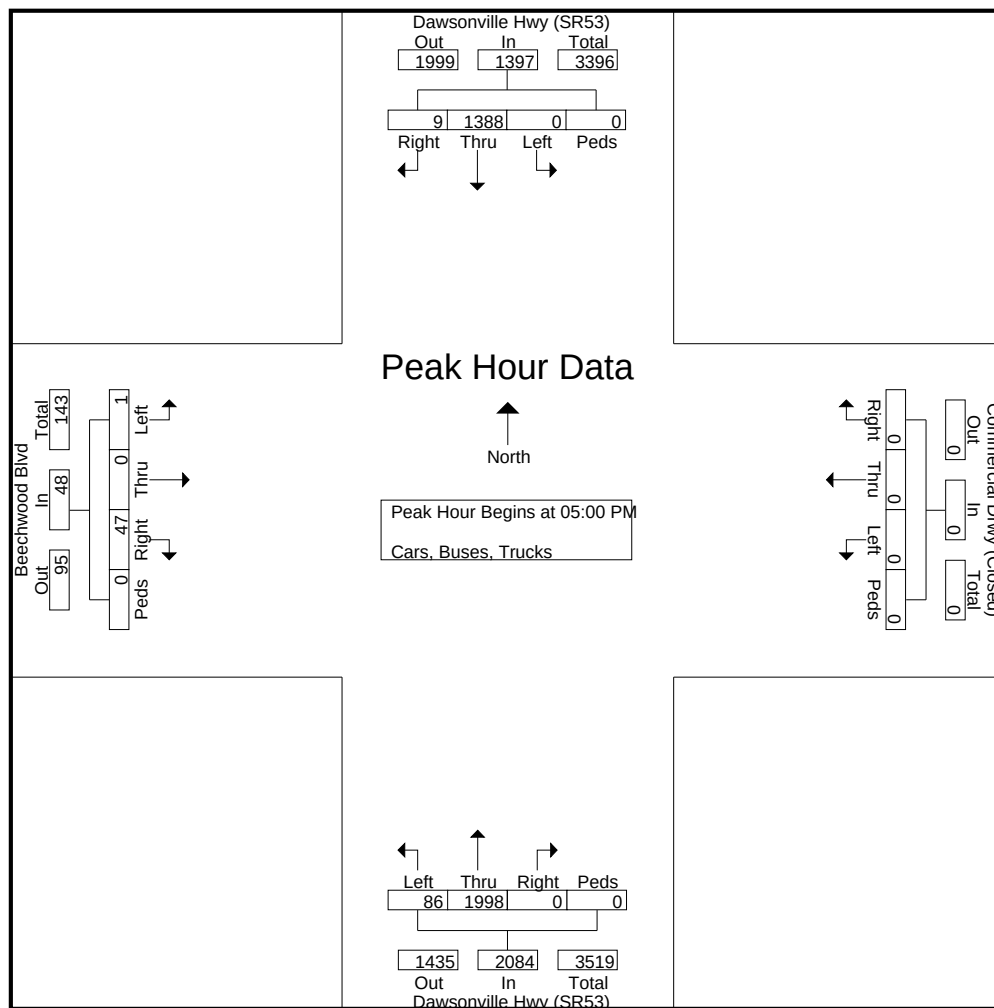
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TMC Data  
Dawsonville Hwy (SR53) @ Beechwood Blvd  
Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520006  
Site Code : 39520006  
Start Date : 11/17/2016  
Page No : 3

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Beechwood Blvd<br>Eastbound |      |       |      |            | Commercial Drwy<br>(Closed)<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|-----------------------------|------|-------|------|------------|------------------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                        | Thru | Right | Peds | App. Total | Left                                     | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                             |      |       |      |            |                                          |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                                      |      |       |      |            |                                      |      |       |      |            |                             |      |       |      |            |                                          |      |       |      |            |            |
| 05:00 PM                                                   | 18                                   | 488  | 0     | 0    | 506        | 0                                    | 347  | 0     | 0    | 347        | 0                           | 0    | 5     | 0    | 5          | 0                                        | 0    | 0     | 0    | 0          | 858        |
| 05:15 PM                                                   | 20                                   | 506  | 0     | 0    | 526        | 0                                    | 354  | 3     | 0    | 357        | 0                           | 0    | 17    | 0    | 17         | 0                                        | 0    | 0     | 0    | 0          | 900        |
| 05:30 PM                                                   | 31                                   | 494  | 0     | 0    | 525        | 0                                    | 346  | 0     | 0    | 346        | 0                           | 0    | 10    | 0    | 10         | 0                                        | 0    | 0     | 0    | 0          | 881        |
| 05:45 PM                                                   | 17                                   | 510  | 0     | 0    | 527        | 0                                    | 341  | 6     | 0    | 347        | 1                           | 0    | 15    | 0    | 16         | 0                                        | 0    | 0     | 0    | 0          | 890        |
| Total Volume                                               | 86                                   | 1998 | 0     | 0    | 2084       | 0                                    | 1388 | 9     | 0    | 1397       | 1                           | 0    | 47    | 0    | 48         | 0                                        | 0    | 0     | 0    | 0          | 3529       |
| % App. Total                                               | 4.1                                  | 95.9 | 0     | 0    |            | 0                                    | 99.4 | 0.6   | 0    |            | 2.1                         | 0    | 97.9  | 0    |            | 0                                        | 0    | 0     | 0    |            |            |
| PHF                                                        | .694                                 | .979 | .000  | .000 | .989       | .000                                 | .980 | .375  | .000 | .978       | .250                        | .000 | .691  | .000 | .706       | .000                                     | .000 | .000  | .000 | .000       | .980       |



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TMC Data  
Dawsonville Hwy (SR53) @ McEver Rd  
Gainesville, GA  
7-9am I 4.30-6.30pm

File Name : 39520007  
Site Code : 39520007  
Start Date : 11/17/2016  
Page No : 1

## Groups Printed- Cars, Buses, Trucks

|               | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | McEver Rd<br>Eastbound |      |       |      |            | Home Depot Drwy<br>Westbound |      |       |      |            |            |
|---------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|------------|
| Start Time    | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                   | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 58                                   | 98   | 3     | 0    | 159        | 2                                    | 206  | 164   | 0    | 372        | 67                     | 4    | 48    | 0    | 119        | 4                            | 2    | 4     | 0    | 10         | 660        |
| 07:15 AM      | 67                                   | 104  | 7     | 0    | 178        | 5                                    | 276  | 187   | 0    | 468        | 93                     | 4    | 88    | 0    | 185        | 8                            | 1    | 2     | 0    | 11         | 842        |
| 07:30 AM      | 72                                   | 110  | 15    | 0    | 197        | 6                                    | 317  | 236   | 0    | 559        | 99                     | 7    | 82    | 0    | 188        | 7                            | 4    | 3     | 0    | 14         | 958        |
| 07:45 AM      | 78                                   | 115  | 18    | 0    | 211        | 10                                   | 325  | 226   | 0    | 561        | 96                     | 6    | 93    | 0    | 195        | 15                           | 4    | 3     | 0    | 22         | 989        |
| Total         | 275                                  | 427  | 43    | 0    | 745        | 23                                   | 1124 | 813   | 0    | 1960       | 355                    | 21   | 311   | 0    | 687        | 34                           | 11   | 12    | 0    | 57         | 3449       |
| 08:00 AM      | 65                                   | 136  | 15    | 0    | 216        | 7                                    | 252  | 179   | 0    | 438        | 102                    | 11   | 79    | 0    | 192        | 12                           | 10   | 10    | 0    | 32         | 878        |
| 08:15 AM      | 66                                   | 121  | 20    | 0    | 207        | 14                                   | 264  | 153   | 0    | 431        | 83                     | 14   | 67    | 0    | 164        | 14                           | 6    | 10    | 0    | 30         | 832        |
| 08:30 AM      | 51                                   | 118  | 21    | 0    | 190        | 20                                   | 233  | 146   | 0    | 399        | 85                     | 16   | 72    | 0    | 173        | 20                           | 8    | 6     | 0    | 34         | 796        |
| 08:45 AM      | 57                                   | 106  | 29    | 0    | 192        | 15                                   | 221  | 108   | 0    | 344        | 102                    | 14   | 81    | 0    | 197        | 18                           | 5    | 10    | 0    | 33         | 766        |
| Total         | 239                                  | 481  | 85    | 0    | 805        | 56                                   | 970  | 586   | 0    | 1612       | 372                    | 55   | 299   | 0    | 726        | 64                           | 29   | 36    | 0    | 129        | 3272       |
| *** BREAK *** |                                      |      |       |      |            |                                      |      |       |      |            |                        |      |       |      |            |                              |      |       |      |            |            |
| 04:30 PM      | 94                                   | 286  | 16    | 0    | 396        | 11                                   | 242  | 90    | 0    | 343        | 178                    | 35   | 78    | 0    | 291        | 30                           | 33   | 19    | 0    | 82         | 1112       |
| 04:45 PM      | 109                                  | 312  | 12    | 0    | 433        | 9                                    | 213  | 112   | 0    | 334        | 215                    | 37   | 93    | 0    | 345        | 31                           | 27   | 21    | 0    | 79         | 1191       |
| Total         | 203                                  | 598  | 28    | 0    | 829        | 20                                   | 455  | 202   | 0    | 677        | 393                    | 72   | 171   | 0    | 636        | 61                           | 60   | 40    | 0    | 161        | 2303       |
| 05:00 PM      | 108                                  | 352  | 17    | 0    | 477        | 15                                   | 257  | 115   | 0    | 387        | 178                    | 42   | 122   | 0    | 342        | 27                           | 19   | 17    | 0    | 63         | 1269       |
| 05:15 PM      | 101                                  | 335  | 11    | 0    | 447        | 12                                   | 259  | 137   | 0    | 408        | 224                    | 63   | 74    | 0    | 361        | 10                           | 33   | 19    | 0    | 62         | 1278       |
| 05:30 PM      | 114                                  | 327  | 10    | 0    | 451        | 17                                   | 216  | 110   | 0    | 343        | 227                    | 59   | 95    | 0    | 381        | 22                           | 21   | 16    | 0    | 59         | 1234       |
| 05:45 PM      | 110                                  | 348  | 8     | 0    | 466        | 18                                   | 297  | 119   | 0    | 434        | 216                    | 49   | 95    | 0    | 360        | 28                           | 18   | 29    | 0    | 75         | 1335       |
| Total         | 433                                  | 1362 | 46    | 0    | 1841       | 62                                   | 1029 | 481   | 0    | 1572       | 845                    | 213  | 386   | 0    | 1444       | 87                           | 91   | 81    | 0    | 259        | 5116       |
| 06:00 PM      | 106                                  | 292  | 15    | 0    | 413        | 22                                   | 236  | 102   | 0    | 360        | 230                    | 24   | 88    | 0    | 342        | 32                           | 18   | 28    | 0    | 78         | 1193       |
| 06:15 PM      | 98                                   | 290  | 12    | 0    | 400        | 11                                   | 238  | 86    | 0    | 335        | 191                    | 16   | 92    | 0    | 299        | 29                           | 14   | 12    | 0    | 55         | 1089       |
| Grand Total   | 1354                                 | 3450 | 229   | 0    | 5033       | 194                                  | 4052 | 2270  | 0    | 6516       | 2386                   | 401  | 1347  | 0    | 4134       | 307                          | 223  | 209   | 0    | 739        | 16422      |
| Apprch %      | 26.9                                 | 68.5 | 4.5   | 0    |            | 3                                    | 62.2 | 34.8  | 0    |            | 57.7                   | 9.7  | 32.6  | 0    |            | 41.5                         | 30.2 | 28.3  | 0    |            |            |
| Total %       | 8.2                                  | 21   | 1.4   | 0    | 30.6       | 1.2                                  | 24.7 | 13.8  | 0    | 39.7       | 14.5                   | 2.4  | 8.2   | 0    | 25.2       | 1.9                          | 1.4  | 1.3   | 0    | 4.5        |            |



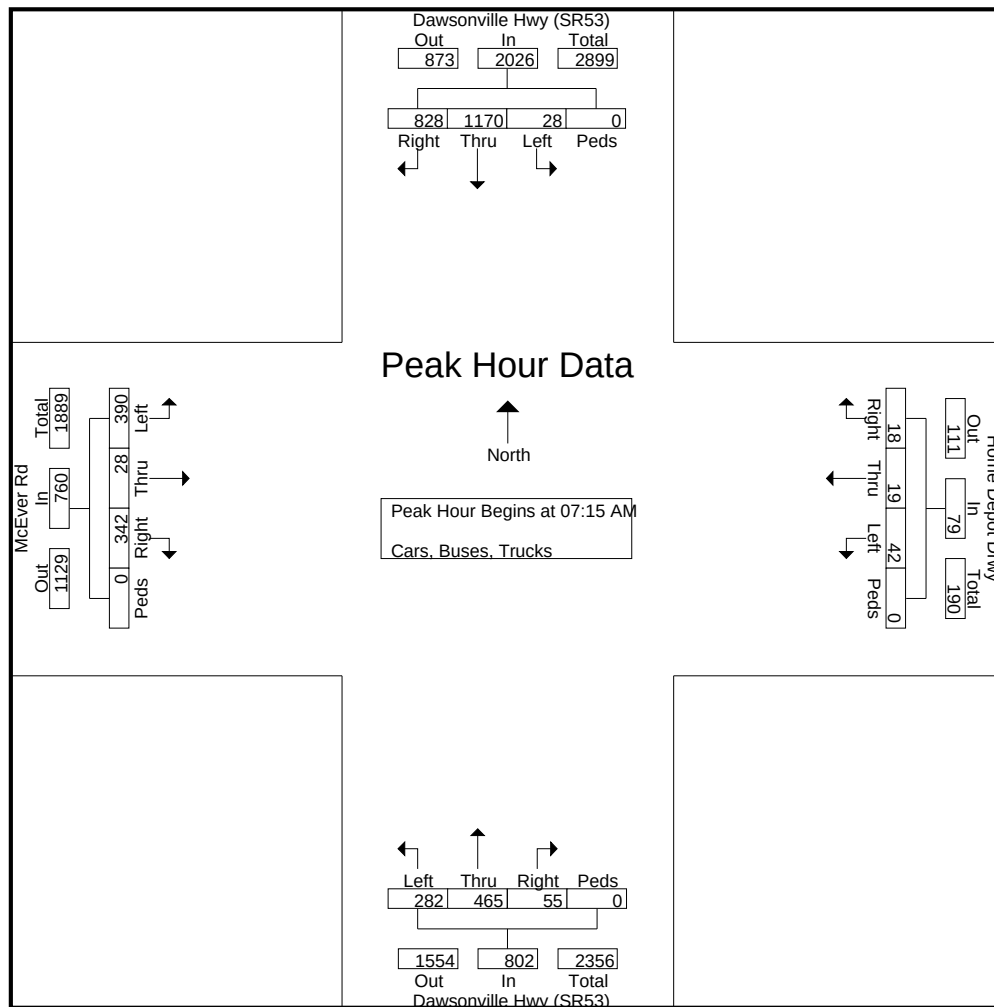
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TMC Data  
Dawsonville Hwy (SR53) @ McEver Rd  
Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520007  
Site Code : 39520007  
Start Date : 11/17/2016  
Page No : 2

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |            |           |      |            | Dawsonville Hwy (SR53)<br>Southbound |            |            |      |            | McEver Rd<br>Eastbound |           |           |      |            | Home Depot Drwy<br>Westbound |           |           |      |            |            |
|------------------------------------------------------------|--------------------------------------|------------|-----------|------|------------|--------------------------------------|------------|------------|------|------------|------------------------|-----------|-----------|------|------------|------------------------------|-----------|-----------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru       | Right     | Peds | App. Total | Left                                 | Thru       | Right      | Peds | App. Total | Left                   | Thru      | Right     | Peds | App. Total | Left                         | Thru      | Right     | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                                      |            |           |      |            |                                      |            |            |      |            |                        |           |           |      |            |                              |           |           |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:15 AM       |                                      |            |           |      |            |                                      |            |            |      |            |                        |           |           |      |            |                              |           |           |      |            |            |
| 07:15 AM                                                   | 67                                   | 104        | 7         | 0    | 178        | 5                                    | 276        | 187        | 0    | 468        | 93                     | 4         | 88        | 0    | 185        | 8                            | 1         | 2         | 0    | 11         | 842        |
| 07:30 AM                                                   | 72                                   | 110        | 15        | 0    | 197        | 6                                    | 317        | <b>236</b> | 0    | 559        | 99                     | 7         | 82        | 0    | 188        | 7                            | 4         | 3         | 0    | 14         | 958        |
| 07:45 AM                                                   | <b>78</b>                            | <b>115</b> | <b>18</b> | 0    | <b>211</b> | <b>10</b>                            | <b>325</b> | 226        | 0    | <b>561</b> | 96                     | 6         | <b>93</b> | 0    | <b>195</b> | <b>15</b>                    | <b>4</b>  | <b>3</b>  | 0    | <b>22</b>  | <b>989</b> |
| 08:00 AM                                                   | 65                                   | <b>136</b> | 15        | 0    | <b>216</b> | 7                                    | 252        | 179        | 0    | 438        | <b>102</b>             | <b>11</b> | 79        | 0    | 192        | <b>12</b>                    | <b>10</b> | <b>10</b> | 0    | <b>32</b>  | 878        |
| Total Volume                                               | 282                                  | 465        | 55        | 0    | 802        | 28                                   | 1170       | 828        | 0    | 2026       | 390                    | 28        | 342       | 0    | 760        | 42                           | 19        | 18        | 0    | 79         | 3667       |
| % App. Total                                               | 35.2                                 | 58         | 6.9       | 0    |            | 1.4                                  | 57.7       | 40.9       | 0    |            | 51.3                   | 3.7       | 45        | 0    |            | 53.2                         | 24.1      | 22.8      | 0    |            |            |
| PHF                                                        | .904                                 | .855       | .764      | .000 | .928       | .700                                 | .900       | .877       | .000 | .903       | .956                   | .636      | .919      | .000 | .974       | .700                         | .475      | .450      | .000 | .617       | .927       |



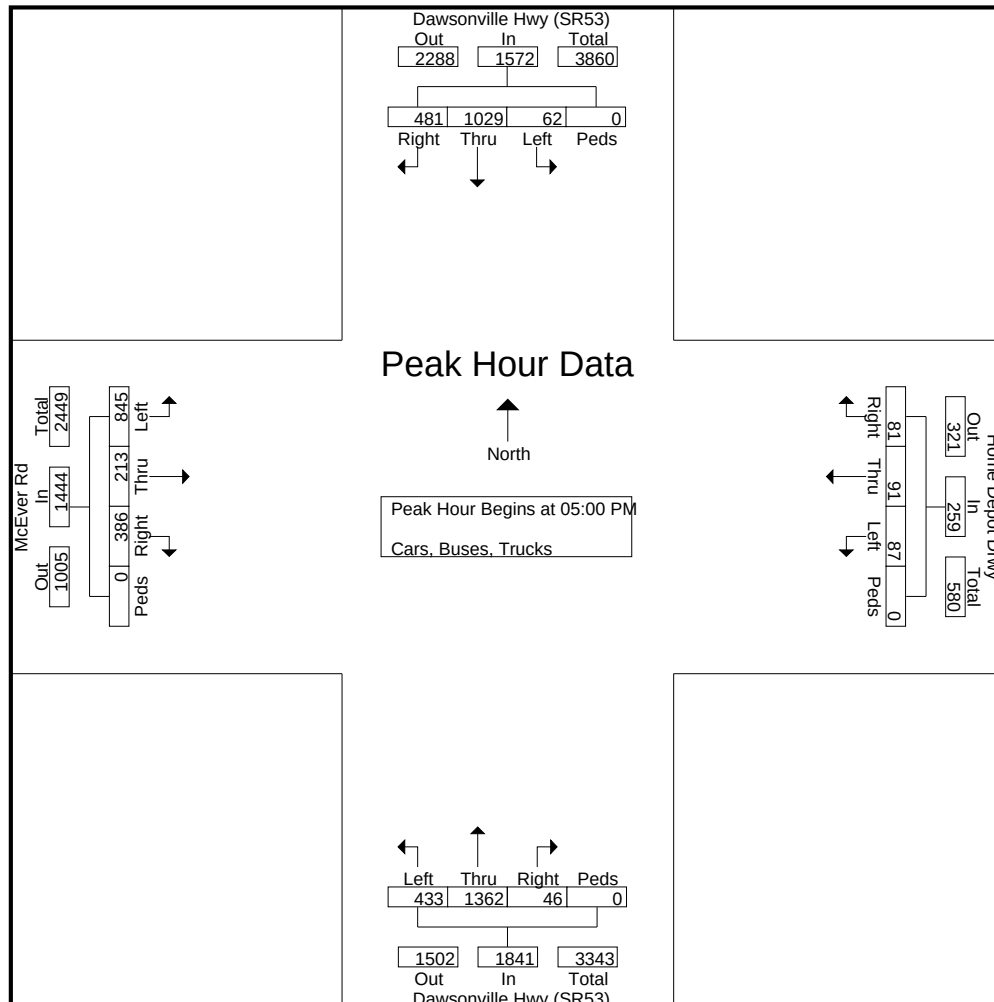
# Reliable Traffic Data Services, LLC

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TMC Data  
Dawsonville Hwy (SR53) @ McEver Rd  
Gainesville, GA  
7-9am I 4.30-6.30pm

File Name : 39520007  
Site Code : 39520007  
Start Date : 11/17/2016  
Page No : 3

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | McEver Rd<br>Eastbound |      |       |      |            | Home Depot Drwy<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                   | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                        |      |       |      |            |                              |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                                      |      |       |      |            |                                      |      |       |      |            |                        |      |       |      |            |                              |      |       |      |            |            |
| 05:00 PM                                                   | 108                                  | 352  | 17    | 0    | 477        | 15                                   | 257  | 115   | 0    | 387        | 178                    | 42   | 122   | 0    | 342        | 27                           | 19   | 17    | 0    | 63         | 1269       |
| 05:15 PM                                                   | 101                                  | 335  | 11    | 0    | 447        | 12                                   | 259  | 137   | 0    | 408        | 224                    | 63   | 74    | 0    | 361        | 10                           | 33   | 19    | 0    | 62         | 1278       |
| 05:30 PM                                                   | 114                                  | 327  | 10    | 0    | 451        | 17                                   | 216  | 110   | 0    | 343        | 227                    | 59   | 95    | 0    | 381        | 22                           | 21   | 16    | 0    | 59         | 1234       |
| 05:45 PM                                                   | 110                                  | 348  | 8     | 0    | 466        | 18                                   | 297  | 119   | 0    | 434        | 216                    | 49   | 95    | 0    | 360        | 28                           | 18   | 29    | 0    | 75         | 1335       |
| Total Volume                                               | 433                                  | 1362 | 46    | 0    | 1841       | 62                                   | 1029 | 481   | 0    | 1572       | 845                    | 213  | 386   | 0    | 1444       | 87                           | 91   | 81    | 0    | 259        | 5116       |
| % App. Total                                               | 23.5                                 | 74   | 2.5   | 0    |            | 3.9                                  | 65.5 | 30.6  | 0    |            | 58.5                   | 14.8 | 26.7  | 0    |            | 33.6                         | 35.1 | 31.3  | 0    |            |            |
| PHF                                                        | .950                                 | .967 | .676  | .000 | .965       | .861                                 | .866 | .878  | .000 | .906       | .931                   | .845 | .791  | .000 | .948       | .777                         | .689 | .698  | .000 | .863       | .958       |



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TMC Data  
Dawsonville Hwy (SR53) @ Green Hill Cir  
Gainesville, GA  
7-9am I 4.30-6.30pm

File Name : 39520008  
Site Code : 39520008  
Start Date : 11/17/2016  
Page No : 1

## Groups Printed- Cars, Buses, Trucks

|               | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Green Hill Circle<br>Eastbound |      |       |      |            | Commercial Drwy<br>Westbound |      |       |      |            |            |
|---------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|--------------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|------------|
| Start Time    | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                           | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 13                                   | 123  | 0     | 0    | 136        | 1                                    | 236  | 7     | 0    | 244        | 10                             | 0    | 22    | 0    | 32         | 1                            | 0    | 0     | 0    | 1          | 413        |
| 07:15 AM      | 33                                   | 134  | 2     | 0    | 169        | 3                                    | 372  | 12    | 0    | 387        | 14                             | 1    | 25    | 0    | 40         | 2                            | 0    | 1     | 0    | 3          | 599        |
| 07:30 AM      | 28                                   | 167  | 1     | 0    | 196        | 2                                    | 387  | 10    | 0    | 399        | 17                             | 0    | 34    | 0    | 51         | 2                            | 0    | 2     | 0    | 4          | 650        |
| 07:45 AM      | 39                                   | 174  | 1     | 0    | 214        | 2                                    | 379  | 14    | 0    | 395        | 21                             | 1    | 36    | 0    | 58         | 2                            | 1    | 0     | 0    | 3          | 670        |
| Total         | 113                                  | 598  | 4     | 0    | 715        | 8                                    | 1374 | 43    | 0    | 1425       | 62                             | 2    | 117   | 0    | 181        | 7                            | 1    | 3     | 0    | 11         | 2332       |
| 08:00 AM      | 33                                   | 189  | 5     | 0    | 227        | 4                                    | 320  | 11    | 0    | 335        | 16                             | 0    | 39    | 0    | 55         | 2                            | 0    | 2     | 0    | 4          | 621        |
| 08:15 AM      | 35                                   | 224  | 3     | 0    | 262        | 4                                    | 318  | 17    | 0    | 339        | 13                             | 0    | 32    | 0    | 45         | 0                            | 0    | 0     | 0    | 0          | 646        |
| 08:30 AM      | 34                                   | 197  | 7     | 0    | 238        | 3                                    | 322  | 15    | 0    | 340        | 10                             | 1    | 28    | 0    | 39         | 1                            | 4    | 0     | 0    | 5          | 622        |
| 08:45 AM      | 29                                   | 205  | 7     | 0    | 241        | 5                                    | 324  | 10    | 0    | 339        | 15                             | 2    | 30    | 0    | 47         | 3                            | 2    | 1     | 0    | 6          | 633        |
| Total         | 131                                  | 815  | 22    | 0    | 968        | 16                                   | 1284 | 53    | 0    | 1353       | 54                             | 3    | 129   | 0    | 186        | 6                            | 6    | 3     | 0    | 15         | 2522       |
| *** BREAK *** |                                      |      |       |      |            |                                      |      |       |      |            |                                |      |       |      |            |                              |      |       |      |            |            |
| 04:30 PM      | 51                                   | 374  | 12    | 0    | 437        | 11                                   | 352  | 11    | 0    | 374        | 23                             | 1    | 30    | 0    | 54         | 20                           | 0    | 9     | 0    | 29         | 894        |
| 04:45 PM      | 57                                   | 408  | 18    | 0    | 483        | 8                                    | 361  | 10    | 0    | 379        | 30                             | 0    | 28    | 0    | 58         | 17                           | 5    | 9     | 0    | 31         | 951        |
| Total         | 108                                  | 782  | 30    | 0    | 920        | 19                                   | 713  | 21    | 0    | 753        | 53                             | 1    | 58    | 0    | 112        | 37                           | 5    | 18    | 0    | 60         | 1845       |
| 05:00 PM      | 60                                   | 436  | 20    | 0    | 516        | 7                                    | 348  | 13    | 0    | 368        | 21                             | 1    | 45    | 0    | 67         | 16                           | 8    | 4     | 0    | 28         | 979        |
| 05:15 PM      | 62                                   | 453  | 19    | 0    | 534        | 12                                   | 362  | 17    | 0    | 391        | 39                             | 2    | 36    | 0    | 77         | 19                           | 5    | 14    | 0    | 38         | 1040       |
| 05:30 PM      | 57                                   | 442  | 12    | 0    | 511        | 12                                   | 337  | 11    | 0    | 360        | 36                             | 6    | 33    | 0    | 75         | 16                           | 5    | 9     | 0    | 30         | 976        |
| 05:45 PM      | 69                                   | 418  | 19    | 0    | 506        | 9                                    | 345  | 12    | 0    | 366        | 36                             | 0    | 24    | 0    | 60         | 9                            | 2    | 11    | 0    | 22         | 954        |
| Total         | 248                                  | 1749 | 70    | 0    | 2067       | 40                                   | 1392 | 53    | 0    | 1485       | 132                            | 9    | 138   | 0    | 279        | 60                           | 20   | 38    | 0    | 118        | 3949       |
| 06:00 PM      | 62                                   | 389  | 22    | 0    | 473        | 4                                    | 369  | 17    | 0    | 390        | 40                             | 1    | 25    | 0    | 66         | 9                            | 6    | 16    | 0    | 31         | 960        |
| 06:15 PM      | 78                                   | 374  | 7     | 0    | 459        | 11                                   | 361  | 22    | 0    | 394        | 29                             | 1    | 19    | 0    | 49         | 16                           | 6    | 17    | 0    | 39         | 941        |
| Grand Total   | 740                                  | 4707 | 155   | 0    | 5602       | 98                                   | 5493 | 209   | 0    | 5800       | 370                            | 17   | 486   | 0    | 873        | 135                          | 44   | 95    | 0    | 274        | 12549      |
| Apprch %      | 13.2                                 | 84   | 2.8   | 0    |            | 1.7                                  | 94.7 | 3.6   | 0    |            | 42.4                           | 1.9  | 55.7  | 0    |            | 49.3                         | 16.1 | 34.7  | 0    |            |            |
| Total %       | 5.9                                  | 37.5 | 1.2   | 0    | 44.6       | 0.8                                  | 43.8 | 1.7   | 0    | 46.2       | 2.9                            | 0.1  | 3.9   | 0    | 7          | 1.1                          | 0.4  | 0.8   | 0    | 2.2        |            |

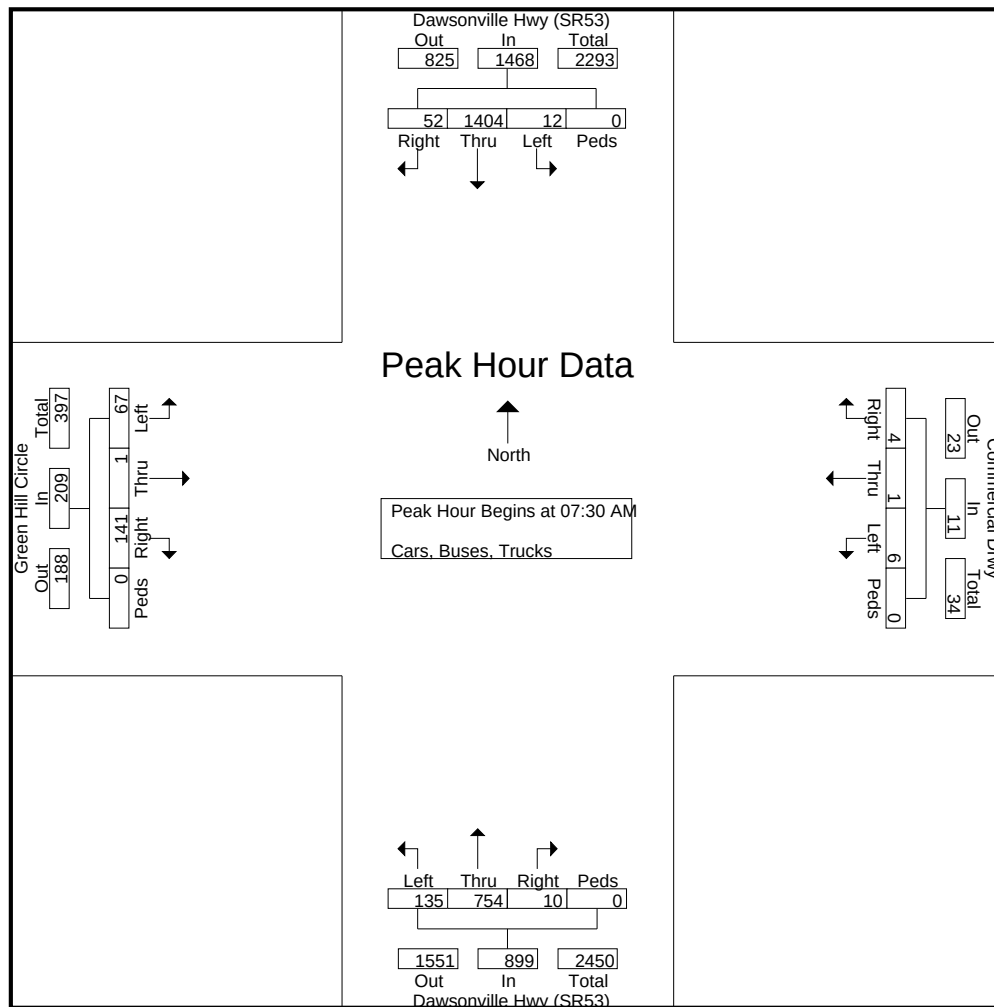
# Reliable Traffic Data Services, LLC

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TMC Data  
Dawsonville Hwy (SR53) @ Green Hill Cir  
Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520008  
Site Code : 39520008  
Start Date : 11/17/2016  
Page No : 2

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Green Hill Circle<br>Eastbound |      |       |      |            | Commercial Drwy<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|--------------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                           | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                                |      |       |      |            |                              |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                                      |      |       |      |            |                                      |      |       |      |            |                                |      |       |      |            |                              |      |       |      |            |            |
| 07:30 AM                                                   | 28                                   | 167  | 1     | 0    | 196        | 2                                    | 387  | 10    | 0    | 399        | 17                             | 0    | 34    | 0    | 51         | 2                            | 0    | 2     | 0    | 4          | 650        |
| 07:45 AM                                                   | 39                                   | 174  | 1     | 0    | 214        | 2                                    | 379  | 14    | 0    | 395        | 21                             | 1    | 36    | 0    | 58         | 2                            | 1    | 0     | 0    | 3          | 670        |
| 08:00 AM                                                   | 33                                   | 189  | 5     | 0    | 227        | 4                                    | 320  | 11    | 0    | 335        | 16                             | 0    | 39    | 0    | 55         | 2                            | 0    | 2     | 0    | 4          | 621        |
| 08:15 AM                                                   | 35                                   | 224  | 3     | 0    | 262        | 4                                    | 318  | 17    | 0    | 339        | 13                             | 0    | 32    | 0    | 45         | 0                            | 0    | 0     | 0    | 0          | 646        |
| Total Volume                                               | 135                                  | 754  | 10    | 0    | 899        | 12                                   | 1404 | 52    | 0    | 1468       | 67                             | 1    | 141   | 0    | 209        | 6                            | 1    | 4     | 0    | 11         | 2587       |
| % App. Total                                               | 15                                   | 83.9 | 1.1   | 0    |            | 0.8                                  | 95.6 | 3.5   | 0    |            | 32.1                           | 0.5  | 67.5  | 0    |            | 54.5                         | 9.1  | 36.4  | 0    |            |            |
| PHF                                                        | .865                                 | .842 | .500  | .000 | .858       | .750                                 | .907 | .765  | .000 | .920       | .798                           | .250 | .904  | .000 | .901       | .750                         | .250 | .500  | .000 | .688       | .965       |



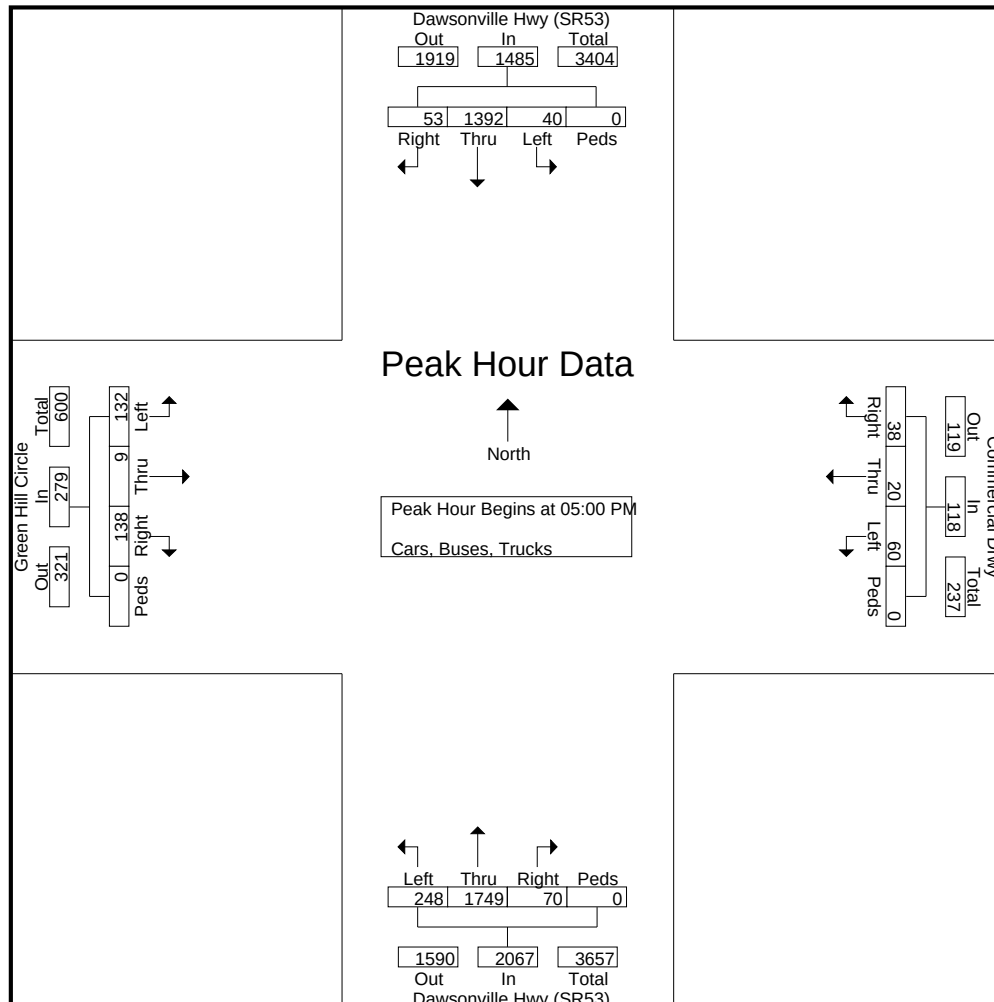
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TMC Data  
Dawsonville Hwy (SR53) @ Green Hill Cir  
Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520008  
Site Code : 39520008  
Start Date : 11/17/2016  
Page No : 3

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Green Hill Circle<br>Eastbound |      |       |      |            | Commercial Drwy<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|--------------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                           | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                                |      |       |      |            |                              |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                                      |      |       |      |            |                                      |      |       |      |            |                                |      |       |      |            |                              |      |       |      |            |            |
| 05:00 PM                                                   | 60                                   | 436  | 20    | 0    | 516        | 7                                    | 348  | 13    | 0    | 368        | 21                             | 1    | 45    | 0    | 67         | 16                           | 8    | 4     | 0    | 28         | 979        |
| 05:15 PM                                                   | 62                                   | 453  | 19    | 0    | 534        | 12                                   | 362  | 17    | 0    | 391        | 39                             | 2    | 36    | 0    | 77         | 19                           | 5    | 14    | 0    | 38         | 1040       |
| 05:30 PM                                                   | 57                                   | 442  | 12    | 0    | 511        | 12                                   | 337  | 11    | 0    | 360        | 36                             | 6    | 33    | 0    | 75         | 16                           | 5    | 9     | 0    | 30         | 976        |
| 05:45 PM                                                   | 69                                   | 418  | 19    | 0    | 506        | 9                                    | 345  | 12    | 0    | 366        | 36                             | 0    | 24    | 0    | 60         | 9                            | 2    | 11    | 0    | 22         | 954        |
| Total Volume                                               | 248                                  | 1749 | 70    | 0    | 2067       | 40                                   | 1392 | 53    | 0    | 1485       | 132                            | 9    | 138   | 0    | 279        | 60                           | 20   | 38    | 0    | 118        | 3949       |
| % App. Total                                               | 12                                   | 84.6 | 3.4   | 0    |            | 2.7                                  | 93.7 | 3.6   | 0    |            | 47.3                           | 3.2  | 49.5  | 0    |            | 50.8                         | 16.9 | 32.2  | 0    |            |            |
| PHF                                                        | .899                                 | .965 | .875  | .000 | .968       | .833                                 | .961 | .779  | .000 | .949       | .846                           | .375 | .767  | .000 | .906       | .789                         | .625 | .679  | .000 | .776       | .949       |



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TMC Data  
Dawsonville Hwy (SR53) @  
Shallowford Rd, Gainesville, GA  
7-9am I 4.30-6.30pm

File Name : 39520009  
Site Code : 39520009  
Start Date : 11/17/2016  
Page No : 1

## Groups Printed- Cars, Buses, Trucks

|               | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Shallowford Rd<br>Eastbound |      |       |      |            | Commercial Drwy<br>Westbound |      |       |      |            |            |
|---------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|-----------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|------------|
| Start Time    | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                        | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 1                                    | 123  | 1     | 0    | 125        | 3                                    | 226  | 58    | 0    | 287        | 15                          | 0    | 1     | 0    | 16         | 1                            | 0    | 0     | 0    | 1          | 429        |
| 07:15 AM      | 4                                    | 136  | 2     | 0    | 142        | 3                                    | 254  | 74    | 0    | 331        | 18                          | 0    | 2     | 0    | 20         | 0                            | 0    | 0     | 0    | 0          | 493        |
| 07:30 AM      | 3                                    | 146  | 1     | 0    | 150        | 0                                    | 334  | 82    | 0    | 416        | 28                          | 0    | 4     | 0    | 32         | 0                            | 1    | 2     | 0    | 3          | 601        |
| 07:45 AM      | 3                                    | 178  | 6     | 0    | 187        | 0                                    | 342  | 85    | 0    | 427        | 35                          | 0    | 2     | 0    | 37         | 0                            | 0    | 0     | 0    | 0          | 651        |
| Total         | 11                                   | 583  | 10    | 0    | 604        | 6                                    | 1156 | 299   | 0    | 1461       | 96                          | 0    | 9     | 0    | 105        | 1                            | 1    | 2     | 0    | 4          | 2174       |
| 08:00 AM      | 3                                    | 188  | 3     | 0    | 194        | 0                                    | 307  | 87    | 0    | 394        | 34                          | 1    | 0     | 0    | 35         | 0                            | 1    | 1     | 0    | 2          | 625        |
| 08:15 AM      | 1                                    | 226  | 3     | 0    | 230        | 1                                    | 266  | 84    | 0    | 351        | 41                          | 1    | 2     | 0    | 44         | 2                            | 2    | 0     | 0    | 4          | 629        |
| 08:30 AM      | 7                                    | 186  | 8     | 0    | 201        | 0                                    | 268  | 82    | 0    | 350        | 45                          | 0    | 3     | 0    | 48         | 0                            | 1    | 0     | 0    | 1          | 600        |
| 08:45 AM      | 3                                    | 190  | 7     | 0    | 200        | 0                                    | 282  | 72    | 0    | 354        | 44                          | 2    | 5     | 0    | 51         | 0                            | 1    | 1     | 0    | 2          | 607        |
| Total         | 14                                   | 790  | 21    | 0    | 825        | 1                                    | 1123 | 325   | 0    | 1449       | 164                         | 4    | 10    | 0    | 178        | 2                            | 5    | 2     | 0    | 9          | 2461       |
| *** BREAK *** |                                      |      |       |      |            |                                      |      |       |      |            |                             |      |       |      |            |                              |      |       |      |            |            |
| 04:30 PM      | 9                                    | 322  | 23    | 0    | 354        | 2                                    | 302  | 102   | 0    | 406        | 109                         | 5    | 6     | 0    | 120        | 7                            | 6    | 5     | 0    | 18         | 898        |
| 04:45 PM      | 9                                    | 379  | 24    | 0    | 412        | 1                                    | 297  | 107   | 0    | 405        | 107                         | 2    | 6     | 0    | 115        | 17                           | 3    | 1     | 0    | 21         | 953        |
| Total         | 18                                   | 701  | 47    | 0    | 766        | 3                                    | 599  | 209   | 0    | 811        | 216                         | 7    | 12    | 0    | 235        | 24                           | 9    | 6     | 0    | 39         | 1851       |
| 05:00 PM      | 12                                   | 393  | 15    | 0    | 420        | 2                                    | 304  | 113   | 0    | 419        | 142                         | 9    | 10    | 0    | 161        | 8                            | 6    | 2     | 0    | 16         | 1016       |
| 05:15 PM      | 5                                    | 441  | 32    | 0    | 478        | 1                                    | 318  | 128   | 0    | 447        | 102                         | 5    | 2     | 0    | 109        | 9                            | 8    | 1     | 0    | 18         | 1052       |
| 05:30 PM      | 12                                   | 388  | 30    | 0    | 430        | 3                                    | 267  | 113   | 0    | 383        | 136                         | 13   | 8     | 0    | 157        | 7                            | 5    | 4     | 0    | 16         | 986        |
| 05:45 PM      | 11                                   | 417  | 37    | 0    | 465        | 1                                    | 272  | 109   | 0    | 382        | 138                         | 11   | 6     | 0    | 155        | 12                           | 8    | 0     | 0    | 20         | 1022       |
| Total         | 40                                   | 1639 | 114   | 0    | 1793       | 7                                    | 1161 | 463   | 0    | 1631       | 518                         | 38   | 26    | 0    | 582        | 36                           | 27   | 7     | 0    | 70         | 4076       |
| 06:00 PM      | 12                                   | 356  | 17    | 0    | 385        | 4                                    | 284  | 150   | 0    | 438        | 108                         | 2    | 11    | 0    | 121        | 16                           | 5    | 1     | 0    | 22         | 966        |
| 06:15 PM      | 10                                   | 334  | 18    | 0    | 362        | 5                                    | 269  | 120   | 0    | 394        | 126                         | 4    | 0     | 0    | 130        | 17                           | 6    | 1     | 0    | 24         | 910        |
| Grand Total   | 105                                  | 4403 | 227   | 0    | 4735       | 26                                   | 4592 | 1566  | 0    | 6184       | 1228                        | 55   | 68    | 0    | 1351       | 96                           | 53   | 19    | 0    | 168        | 12438      |
| Apprch %      | 2.2                                  | 93   | 4.8   | 0    |            | 0.4                                  | 74.3 | 25.3  | 0    |            | 90.9                        | 4.1  | 5     | 0    |            | 57.1                         | 31.5 | 11.3  | 0    |            |            |
| Total %       | 0.8                                  | 35.4 | 1.8   | 0    | 38.1       | 0.2                                  | 36.9 | 12.6  | 0    | 49.7       | 9.9                         | 0.4  | 0.5   | 0    | 10.9       | 0.8                          | 0.4  | 0.2   | 0    | 1.4        |            |

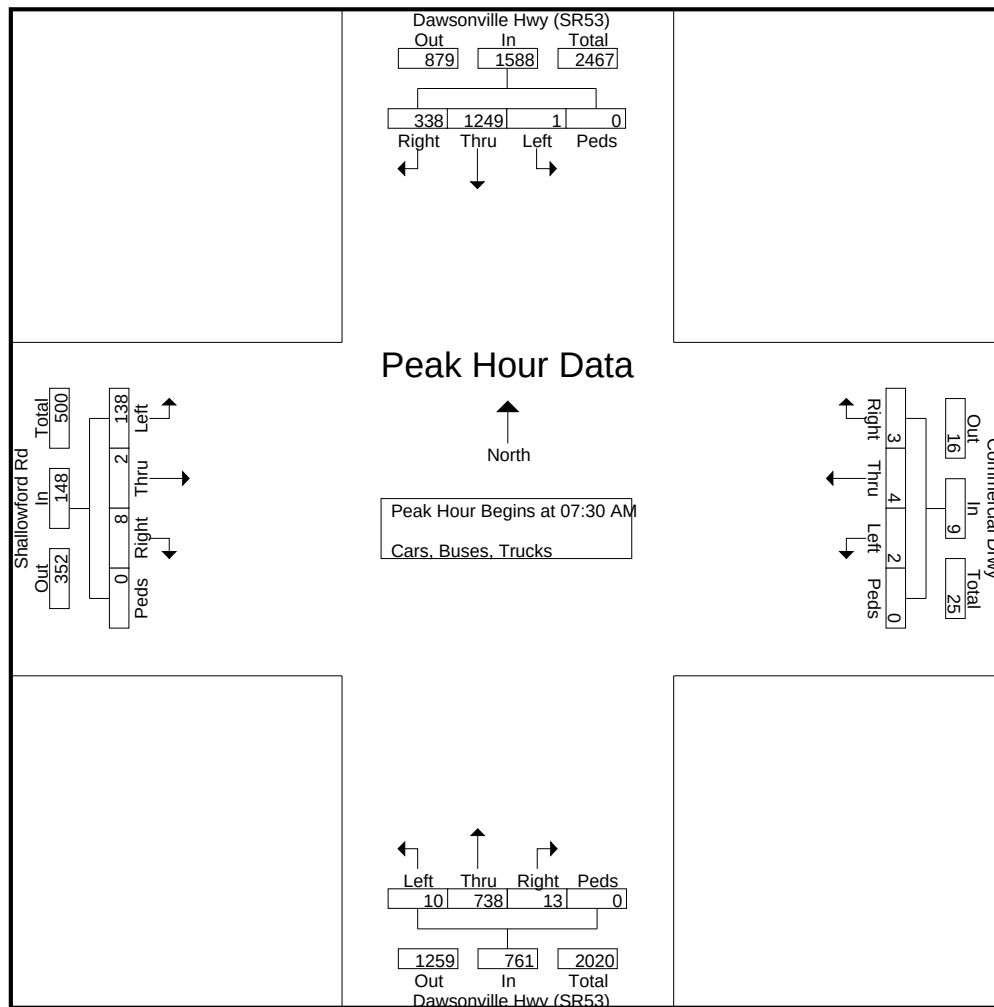
# Reliable Traffic Data Services, LLC

Tel: (770) 578-8158 | Fax: (770) 578-8159  
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TMC Data  
Dawsonville Hwy (SR53) @  
Shallowford Rd, Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520009  
Site Code : 39520009  
Start Date : 11/17/2016  
Page No : 2

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Shallowford Rd<br>Eastbound |      |       |      |            | Commercial Drwy<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|-----------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                        | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                             |      |       |      |            |                              |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                                      |      |       |      |            |                                      |      |       |      |            |                             |      |       |      |            |                              |      |       |      |            |            |
| 07:30 AM                                                   | 3                                    | 146  | 1     | 0    | 150        | 0                                    | 334  | 82    | 0    | 416        | 28                          | 0    | 4     | 0    | 32         | 0                            | 1    | 2     | 0    | 3          | 601        |
| 07:45 AM                                                   | 3                                    | 178  | 6     | 0    | 187        | 0                                    | 342  | 85    | 0    | 427        | 35                          | 0    | 2     | 0    | 37         | 0                            | 0    | 0     | 0    | 0          | 651        |
| 08:00 AM                                                   | 3                                    | 188  | 3     | 0    | 194        | 0                                    | 307  | 87    | 0    | 394        | 34                          | 1    | 0     | 0    | 35         | 0                            | 1    | 1     | 0    | 2          | 625        |
| 08:15 AM                                                   | 1                                    | 226  | 3     | 0    | 230        | 1                                    | 266  | 84    | 0    | 351        | 41                          | 1    | 2     | 0    | 44         | 2                            | 2    | 0     | 0    | 4          | 629        |
| Total Volume                                               | 10                                   | 738  | 13    | 0    | 761        | 1                                    | 1249 | 338   | 0    | 1588       | 138                         | 2    | 8     | 0    | 148        | 2                            | 4    | 3     | 0    | 9          | 2506       |
| % App. Total                                               | 1.3                                  | 97   | 1.7   | 0    |            | 0.1                                  | 78.7 | 21.3  | 0    |            | 93.2                        | 1.4  | 5.4   | 0    |            | 22.2                         | 44.4 | 33.3  | 0    |            |            |
| PHF                                                        | .833                                 | .816 | .542  | .000 | .827       | .250                                 | .913 | .971  | .000 | .930       | .841                        | .500 | .500  | .000 | .841       | .250                         | .500 | .375  | .000 | .563       | .962       |





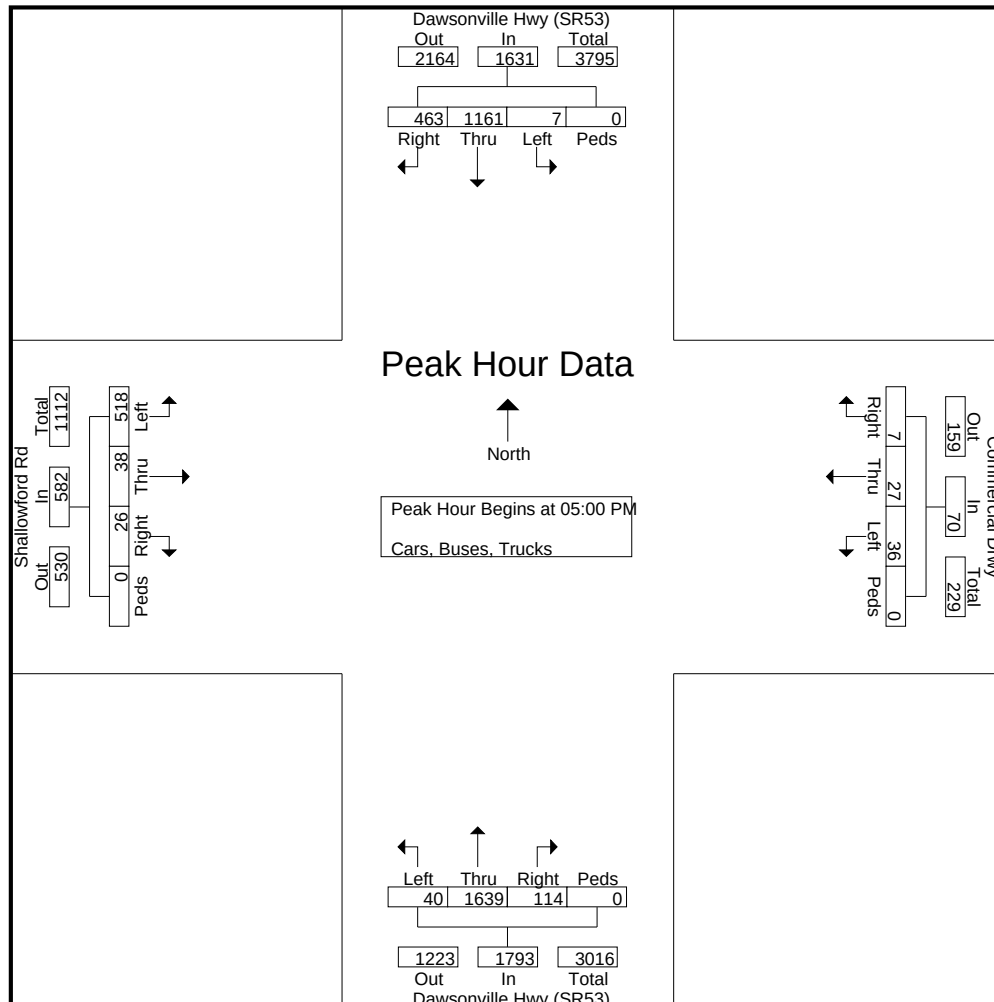
# Reliable Traffic Data Services, LLC

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TMC Data  
Dawsonville Hwy (SR53) @  
Shallowford Rd, Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520009  
Site Code : 39520009  
Start Date : 11/17/2016  
Page No : 3

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Shallowford Rd<br>Eastbound |      |       |      |            | Commercial Drwy<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|-----------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                        | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                             |      |       |      |            |                              |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                                      |      |       |      |            |                                      |      |       |      |            |                             |      |       |      |            |                              |      |       |      |            |            |
| 05:00 PM                                                   | 12                                   | 393  | 15    | 0    | 420        | 2                                    | 304  | 113   | 0    | 419        | 142                         | 9    | 10    | 0    | 161        | 8                            | 6    | 2     | 0    | 16         | 1016       |
| 05:15 PM                                                   | 5                                    | 441  | 32    | 0    | 478        | 1                                    | 318  | 128   | 0    | 447        | 102                         | 5    | 2     | 0    | 109        | 9                            | 8    | 1     | 0    | 18         | 1052       |
| 05:30 PM                                                   | 12                                   | 388  | 30    | 0    | 430        | 3                                    | 267  | 113   | 0    | 383        | 136                         | 13   | 8     | 0    | 157        | 7                            | 5    | 4     | 0    | 16         | 986        |
| 05:45 PM                                                   | 11                                   | 417  | 37    | 0    | 465        | 1                                    | 272  | 109   | 0    | 382        | 138                         | 11   | 6     | 0    | 155        | 12                           | 8    | 0     | 0    | 20         | 1022       |
| Total Volume                                               | 40                                   | 1639 | 114   | 0    | 1793       | 7                                    | 1161 | 463   | 0    | 1631       | 518                         | 38   | 26    | 0    | 582        | 36                           | 27   | 7     | 0    | 70         | 4076       |
| % App. Total                                               | 2.2                                  | 91.4 | 6.4   | 0    |            | 0.4                                  | 71.2 | 28.4  | 0    |            | 89                          | 6.5  | 4.5   | 0    |            | 51.4                         | 38.6 | 10    | 0    |            |            |
| PHF                                                        | .833                                 | .929 | .770  | .000 | .938       | .583                                 | .913 | .904  | .000 | .912       | .912                        | .731 | .650  | .000 | .904       | .750                         | .844 | .438  | .000 | .875       | .969       |



## Appendix B

### Intersection Analysis Methodology

# Intersection Analysis Methodology

The methodology used for evaluating traffic operations at intersections is presented in the Transportation Research Board’s *Highway Capacity Manual*, 2010 edition (HCM 2010). Synchro 8 software, which emulates the HCM 2010 methodology, was used for all analyses. The following is an overview of the methodology employed for the analysis of signalized intersections and stop-sign controlled (unsignalized) intersections.

## Signalized Intersections

The criteria for evaluating signalized intersections are capacity and level of service. The capacity analysis of an intersection compares the volume of traffic using the various lane groups at the intersection to the capacity of those lane groups. This produces a volume-to-capacity (v/c) ratio for each lane group. A v/c ratio greater than 1.0 indicates that the volume of traffic has exceeded the capacity available and indicates a temporary excess of demand. The HCM 2010 methodology computes a critical v/c ratio for an intersection based on the critical lane groups or approaches. This critical v/c ratio is an indication of overall intersection sufficiency.

Level of service for a signalized intersection is defined in terms of control delay per vehicle. For signalized intersections, a composite intersection level of service is determined. The thresholds for each level of service are higher for signalized intersections than for unsignalized intersections. This is attributable to a variety of factors including expectation and acceptance of higher delays at signals, and the fact that drivers can relax when waiting at a signal as opposed to having to remain attentive as they proceed through the unsignalized intersection. The level of service criteria for signalized intersections are shown in Table A.

**Table A – Level of Service Criteria for Signalized Intersections**

| Control Delay (s/veh) | Level of Service by Volume-to-Capacity Ratio |      |
|-----------------------|----------------------------------------------|------|
|                       | ≤1.0                                         | >1.0 |
| ≤ 10                  | A                                            | F    |
| > 10 and ≤ 20         | B                                            | F    |
| > 20 and ≤ 35         | C                                            | F    |
| > 35 and ≤ 55         | D                                            | F    |
| > 55 and ≤ 80         | E                                            | F    |
| > 80                  | F                                            | F    |

Source: *Highway Capacity Manual 2010*

## Unsignalized Intersections

The operations at an unsignalized intersection are defined in terms of levels of service. Level of service (LOS) is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. Level of service for an unsignalized intersection is defined in terms of control delay per vehicle. Control delay is that portion of delay attributable to the control device and includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The delays at unsignalized intersections are based on gap acceptance theory,

factoring in availability of gaps, usefulness of the gaps, and the priority of right-of-way given to each traffic stream.

Levels of service are assigned letters A through F. LOS A indicates operations with very low control delay while LOS F describes operations with high control delay. LOS F is considered to be unacceptable by most drivers, while LOS E is typically considered to be the limit of acceptable delay. The level of service criteria for unsignalized intersections are presented in Table B.

**Table B – Level of Service Criteria for Unsignalized Intersections**

| Control Delay (s/veh) | Level of Service by Volume-to-Capacity Ratio |         |
|-----------------------|----------------------------------------------|---------|
|                       | $\leq 1.0$                                   | $> 1.0$ |
| 0 – 10                | A                                            | F       |
| > 10 and $\leq 15$    | B                                            | F       |
| > 15 and $\leq 25$    | C                                            | F       |
| > 25 and $\leq 35$    | D                                            | F       |
| > 35 and $\leq 50$    | E                                            | F       |
| > 50                  | F                                            | F       |

Source: *Highway Capacity Manual 2010*

## Appendix C

### Existing Intersection Analysis

Lanier Tract DRI  
1: Sportsman Club Road & Strickland Drive

existing a.m.

| Intersection             |        |       |        |      |        |      |
|--------------------------|--------|-------|--------|------|--------|------|
| Int Delay, s/veh         | 2.6    |       |        |      |        |      |
|                          |        |       |        |      |        |      |
| Movement                 | WBL    | WBR   | NBT    | NBR  | SBL    | SBT  |
| Vol, veh/h               | 10     | 0     | 6      | 1    | 0      | 23   |
| Conflicting Peds, #/hr   | 0      | 0     | 0      | 0    | 0      | 0    |
| Sign Control             | Stop   | Stop  | Free   | Free | Free   | Free |
| RT Channelized           | -      | None  | -      | None | -      | None |
| Storage Length           | 0      | -     | -      | -    | -      | -    |
| Veh in Median Storage, # | 0      | -     | 0      | -    | -      | 0    |
| Grade, %                 | 0      | -     | 0      | -    | -      | 0    |
| Peak Hour Factor         | 50     | 50    | 58     | 58   | 64     | 64   |
| Heavy Vehicles, %        | 2      | 2     | 2      | 2    | 2      | 2    |
| Mvmt Flow                | 20     | 0     | 10     | 2    | 0      | 36   |
|                          |        |       |        |      |        |      |
| Major/Minor              | Minor1 |       | Major1 |      | Major2 |      |
| Conflicting Flow All     | 47     | 11    | 0      | 0    | 12     | 0    |
| Stage 1                  | 11     | -     | -      | -    | -      | -    |
| Stage 2                  | 36     | -     | -      | -    | -      | -    |
| Critical Hdwy            | 6.42   | 6.22  | -      | -    | 4.12   | -    |
| Critical Hdwy Stg 1      | 5.42   | -     | -      | -    | -      | -    |
| Critical Hdwy Stg 2      | 5.42   | -     | -      | -    | -      | -    |
| Follow-up Hdwy           | 3.518  | 3.318 | -      | -    | 2.218  | -    |
| Pot Cap-1 Maneuver       | 963    | 1070  | -      | -    | 1607   | -    |
| Stage 1                  | 1012   | -     | -      | -    | -      | -    |
| Stage 2                  | 986    | -     | -      | -    | -      | -    |
| Platoon blocked, %       |        |       | -      | -    |        | -    |
| Mov Cap-1 Maneuver       | 963    | 1070  | -      | -    | 1607   | -    |
| Mov Cap-2 Maneuver       | 963    | -     | -      | -    | -      | -    |
| Stage 1                  | 1012   | -     | -      | -    | -      | -    |
| Stage 2                  | 986    | -     | -      | -    | -      | -    |
|                          |        |       |        |      |        |      |
| Approach                 | WB     | NB    |        | SB   |        |      |
| HCM Control Delay, s     | 8.8    | 0     |        | 0    |        |      |
| HCM LOS                  | A      |       |        |      |        |      |
|                          |        |       |        |      |        |      |
| Minor Lane/Major Mvmt    | NBT    | NBR   | WBLn1  | SBL  | SBT    |      |
| Capacity (veh/h)         | -      | -     | 963    | 1607 | -      |      |
| HCM Lane V/C Ratio       | -      | -     | 0.021  | -    | -      |      |
| HCM Control Delay (s)    | -      | -     | 8.8    | 0    | -      |      |
| HCM Lane LOS             | -      | -     | A      | A    | -      |      |
| HCM 95th %tile Q(veh)    | -      | -     | 0.1    | 0    | -      |      |

Lanier Tract DRI  
2: GA 53 & Sportsman Club Road

existing a.m.

| Intersection             |        |       |      |        |      |      |        |       |      |        |      |      |
|--------------------------|--------|-------|------|--------|------|------|--------|-------|------|--------|------|------|
| Int Delay, s/veh         |        | 5.3   |      |        |      |      |        |       |      |        |      |      |
|                          |        |       |      |        |      |      |        |       |      |        |      |      |
| Movement                 | EBL    | EBT   | EBR  | WBL    | WBT  | WBR  | NBL    | NBT   | NBR  | SBL    | SBT  | SBR  |
| Vol, veh/h               | 9      | 1687  | 0    | 0      | 743  | 8    | 0      | 0     | 0    | 25     | 0    | 15   |
| Conflicting Peds, #/hr   | 0      | 0     | 0    | 0      | 0    | 0    | 0      | 0     | 0    | 0      | 0    | 0    |
| Sign Control             | Free   | Free  | Free | Free   | Free | Free | Stop   | Stop  | Stop | Stop   | Stop | Stop |
| RT Channelized           | -      | -     | None | -      | -    | None | -      | -     | None | -      | -    | None |
| Storage Length           | 0      | -     | -    | 0      | -    | -    | -      | -     | -    | -      | -    | -    |
| Veh in Median Storage, # | -      | 0     | -    | -      | 0    | -    | -      | 0     | -    | -      | 0    | -    |
| Grade, %                 | -      | 0     | -    | -      | 0    | -    | -      | 0     | -    | -      | 0    | -    |
| Peak Hour Factor         | 86     | 86    | 86   | 84     | 84   | 84   | 92     | 92    | 92   | 59     | 59   | 59   |
| Heavy Vehicles, %        | 2      | 2     | 2    | 2      | 2    | 2    | 2      | 2     | 2    | 2      | 2    | 2    |
| Mvmt Flow                | 10     | 1962  | 0    | 0      | 885  | 10   | 0      | 0     | 0    | 42     | 0    | 25   |
|                          |        |       |      |        |      |      |        |       |      |        |      |      |
| Major/Minor              | Major1 |       |      | Major2 |      |      | Minor1 |       |      | Minor2 |      |      |
| Conflicting Flow All     | 894    | 0     | 0    | 1962   | 0    | 0    | 2425   | 2877  | 981  | 1891   | 2872 | 447  |
| Stage 1                  | -      | -     | -    | -      | -    | -    | 1983   | 1983  | -    | 889    | 889  | -    |
| Stage 2                  | -      | -     | -    | -      | -    | -    | 442    | 894   | -    | 1002   | 1983 | -    |
| Critical Hdwy            | 4.14   | -     | -    | 4.14   | -    | -    | 7.54   | 6.54  | 6.94 | 7.54   | 6.54 | 6.94 |
| Critical Hdwy Stg 1      | -      | -     | -    | -      | -    | -    | 6.54   | 5.54  | -    | 6.54   | 5.54 | -    |
| Critical Hdwy Stg 2      | -      | -     | -    | -      | -    | -    | 6.54   | 5.54  | -    | 6.54   | 5.54 | -    |
| Follow-up Hdwy           | 2.22   | -     | -    | 2.22   | -    | -    | 3.52   | 4.02  | 3.32 | 3.52   | 4.02 | 3.32 |
| Pot Cap-1 Maneuver       | 755    | -     | -    | 293    | -    | -    | 17     | 16    | 249  | 43     | 16   | 559  |
| Stage 1                  | -      | -     | -    | -      | -    | -    | 63     | 105   | -    | 304    | 360  | -    |
| Stage 2                  | -      | -     | -    | -      | -    | -    | 564    | 358   | -    | 260    | 105  | -    |
| Platoon blocked, %       |        | -     | -    |        | -    | -    |        |       |      |        |      |      |
| Mov Cap-1 Maneuver       | 755    | -     | -    | 293    | -    | -    | 16     | 16    | 249  | 43     | 16   | 559  |
| Mov Cap-2 Maneuver       | -      | -     | -    | -      | -    | -    | 16     | 16    | -    | 43     | 16   | -    |
| Stage 1                  | -      | -     | -    | -      | -    | -    | 62     | 104   | -    | 300    | 360  | -    |
| Stage 2                  | -      | -     | -    | -      | -    | -    | 538    | 358   | -    | 257    | 104  | -    |
|                          |        |       |      |        |      |      |        |       |      |        |      |      |
| Approach                 | EB     |       |      | WB     |      |      | NB     |       |      | SB     |      |      |
| HCM Control Delay, s     | 0.1    |       |      | 0      |      |      | 0      |       |      | 224.6  |      |      |
| HCM LOS                  |        |       |      |        |      |      | A      |       |      | F      |      |      |
|                          |        |       |      |        |      |      |        |       |      |        |      |      |
| Minor Lane/Major Mvmt    | NBLn1  | EBL   | EBT  | EBR    | WBL  | WBT  | WBR    | SBLn1 |      |        |      |      |
| Capacity (veh/h)         | -      | 755   | -    | -      | 293  | -    | -      | 66    |      |        |      |      |
| HCM Lane V/C Ratio       | -      | 0.014 | -    | -      | -    | -    | -      | 1.027 |      |        |      |      |
| HCM Control Delay (s)    | 0      | 9.8   | -    | -      | 0    | -    | -      | 224.6 |      |        |      |      |
| HCM Lane LOS             | A      | A     | -    | -      | A    | -    | -      | F     |      |        |      |      |
| HCM 95th %tile Q(veh)    | -      | 0     | -    | -      | 0    | -    | -      | 5.2   |      |        |      |      |

Lanier Tract DRI  
3: GA 53 & Avonlea Way

existing a.m.

| Intersection             |        |        |       |        |      |      |
|--------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh         | 2.5    |        |       |        |      |      |
|                          |        |        |       |        |      |      |
| Movement                 | EBL    | EBR    | NBL   | NBT    | SBT  | SBR  |
| Vol, veh/h               | 15     | 72     | 12    | 758    | 1668 | 6    |
| Conflicting Peds, #/hr   | 0      | 0      | 0     | 0      | 0    | 0    |
| Sign Control             | Stop   | Stop   | Free  | Free   | Free | Free |
| RT Channelized           | -      | None   | -     | None   | -    | None |
| Storage Length           | 0      | 0      | 0     | -      | -    | 0    |
| Veh in Median Storage, # | 0      | -      | -     | 0      | 0    | -    |
| Grade, %                 | 0      | -      | -     | 0      | 0    | -    |
| Peak Hour Factor         | 84     | 84     | 88    | 88     | 86   | 86   |
| Heavy Vehicles, %        | 2      | 2      | 2     | 2      | 2    | 2    |
| Mvmt Flow                | 18     | 86     | 14    | 861    | 1940 | 7    |
|                          |        |        |       |        |      |      |
| Major/Minor              | Minor2 | Major1 |       | Major2 |      |      |
| Conflicting Flow All     | 2398   | 970    | 1940  | 0      | -    | 0    |
| Stage 1                  | 1940   | -      | -     | -      | -    | -    |
| Stage 2                  | 458    | -      | -     | -      | -    | -    |
| Critical Hdwy            | 6.84   | 6.94   | 4.14  | -      | -    | -    |
| Critical Hdwy Stg 1      | 5.84   | -      | -     | -      | -    | -    |
| Critical Hdwy Stg 2      | 5.84   | -      | -     | -      | -    | -    |
| Follow-up Hdwy           | 3.52   | 3.32   | 2.22  | -      | -    | -    |
| Pot Cap-1 Maneuver       | 28     | 253    | 299   | -      | -    | -    |
| Stage 1                  | 98     | -      | -     | -      | -    | -    |
| Stage 2                  | 604    | -      | -     | -      | -    | -    |
| Platoon blocked, %       |        |        |       | -      | -    | -    |
| Mov Cap-1 Maneuver       | 27     | 253    | 299   | -      | -    | -    |
| Mov Cap-2 Maneuver       | 27     | -      | -     | -      | -    | -    |
| Stage 1                  | 98     | -      | -     | -      | -    | -    |
| Stage 2                  | 576    | -      | -     | -      | -    | -    |
|                          |        |        |       |        |      |      |
| Approach                 | EB     | NB     |       | SB     |      |      |
| HCM Control Delay, s     | 69.3   | 0.3    |       | 0      |      |      |
| HCM LOS                  | F      |        |       |        |      |      |
|                          |        |        |       |        |      |      |
| Minor Lane/Major Mvmt    | NBL    | NBT    | EBLn1 | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)         | 299    | -      | 27    | 253    | -    | -    |
| HCM Lane V/C Ratio       | 0.046  | -      | 0.661 | 0.339  | -    | -    |
| HCM Control Delay (s)    | 17.6   | -      | 275.4 | 26.4   | -    | -    |
| HCM Lane LOS             | C      | -      | F     | D      | -    | -    |
| HCM 95th %tile Q(veh)    | 0.1    | -      | 2.1   | 1.4    | -    | -    |



Lanier Tract DRI  
4: GA 53 & Canterbury Road

existing a.m.

| Intersection             |        |        |       |        |      |      |
|--------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh         | 3.8    |        |       |        |      |      |
| Movement                 | EBL    | EBR    | NBL   | NBT    | SBT  | SBR  |
| Vol, veh/h               | 18     | 95     | 23    | 722    | 1782 | 7    |
| Conflicting Peds, #/hr   | 0      | 0      | 0     | 0      | 0    | 0    |
| Sign Control             | Stop   | Stop   | Free  | Free   | Free | Free |
| RT Channelized           | -      | None   | -     | None   | -    | None |
| Storage Length           | 0      | 0      | 0     | -      | -    | 0    |
| Veh in Median Storage, # | 0      | -      | -     | 0      | 0    | -    |
| Grade, %                 | 0      | -      | -     | 0      | 0    | -    |
| Peak Hour Factor         | 88     | 88     | 86    | 86     | 91   | 91   |
| Heavy Vehicles, %        | 2      | 2      | 2     | 2      | 2    | 2    |
| Mvmt Flow                | 20     | 108    | 27    | 840    | 1958 | 8    |
| Major/Minor              | Minor2 | Major1 |       | Major2 |      |      |
| Conflicting Flow All     | 2431   | 979    | 1958  | 0      | -    | 0    |
| Stage 1                  | 1958   | -      | -     | -      | -    | -    |
| Stage 2                  | 473    | -      | -     | -      | -    | -    |
| Critical Hdwy            | 6.84   | 6.94   | 4.14  | -      | -    | -    |
| Critical Hdwy Stg 1      | 5.84   | -      | -     | -      | -    | -    |
| Critical Hdwy Stg 2      | 5.84   | -      | -     | -      | -    | -    |
| Follow-up Hdwy           | 3.52   | 3.32   | 2.22  | -      | -    | -    |
| Pot Cap-1 Maneuver       | 26     | 249    | 294   | -      | -    | -    |
| Stage 1                  | 96     | -      | -     | -      | -    | -    |
| Stage 2                  | 593    | -      | -     | -      | -    | -    |
| Platoon blocked, %       |        |        |       | -      | -    | -    |
| Mov Cap-1 Maneuver       | 24     | 249    | 294   | -      | -    | -    |
| Mov Cap-2 Maneuver       | 24     | -      | -     | -      | -    | -    |
| Stage 1                  | 96     | -      | -     | -      | -    | -    |
| Stage 2                  | 539    | -      | -     | -      | -    | -    |
| Approach                 | EB     | NB     |       | SB     |      |      |
| HCM Control Delay, s     | 83.3   | 0.6    |       | 0      |      |      |
| HCM LOS                  | F      |        |       |        |      |      |
| Minor Lane/Major Mvmt    | NBL    | NBT    | EBLn1 | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)         | 294    | -      | 24    | 249    | -    | -    |
| HCM Lane V/C Ratio       | 0.091  | -      | 0.852 | 0.434  | -    | -    |
| HCM Control Delay (s)    | 18.5   | -      | 363.9 | 30.1   | -    | -    |
| HCM Lane LOS             | C      | -      | F     | D      | -    | -    |
| HCM 95th %tile Q(veh)    | 0.3    | -      | 2.6   | 2.1    | -    | -    |

| Intersection             |        |        |       |        |      |      |
|--------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh         | 1.4    |        |       |        |      |      |
| Movement                 | EBL    | EBR    | NBL   | NBT    | SBT  | SBR  |
| Vol, veh/h               | 5      | 41     | 27    | 787    | 2006 | 2    |
| Conflicting Peds, #/hr   | 0      | 0      | 0     | 0      | 0    | 0    |
| Sign Control             | Stop   | Stop   | Free  | Free   | Free | Free |
| RT Channelized           | -      | Yield  | -     | Yield  | -    | None |
| Storage Length           | 0      | 0      | 200   | -      | -    | 360  |
| Veh in Median Storage, # | 0      | -      | -     | 0      | 0    | -    |
| Grade, %                 | 0      | -      | -     | 1      | 0    | -    |
| Peak Hour Factor         | 82     | 82     | 87    | 87     | 89   | 89   |
| Heavy Vehicles, %        | 0      | 0      | 0     | 1      | 0    | 0    |
| Mvmt Flow                | 6      | 50     | 31    | 905    | 2254 | 2    |
| Major/Minor              | Minor2 | Major1 |       | Major2 |      |      |
| Conflicting Flow All     | 2768   | 1127   | 2254  | 0      | -    | 0    |
| Stage 1                  | 2254   | -      | -     | -      | -    | -    |
| Stage 2                  | 514    | -      | -     | -      | -    | -    |
| Critical Hdwy            | 6.8    | 6.9    | 4.1   | -      | -    | -    |
| Critical Hdwy Stg 1      | 5.8    | -      | -     | -      | -    | -    |
| Critical Hdwy Stg 2      | 5.8    | -      | -     | -      | -    | -    |
| Follow-up Hdwy           | 3.5    | 3.3    | 2.2   | -      | -    | -    |
| Pot Cap-1 Maneuver       | 16     | 202    | 231   | -      | -    | -    |
| Stage 1                  | 67     | -      | -     | -      | -    | -    |
| Stage 2                  | 571    | -      | -     | -      | -    | -    |
| Platoon blocked, %       |        |        |       | -      | -    | -    |
| Mov Cap-1 Maneuver       | 14     | 202    | 231   | -      | -    | -    |
| Mov Cap-2 Maneuver       | 14     | -      | -     | -      | -    | -    |
| Stage 1                  | 67     | -      | -     | -      | -    | -    |
| Stage 2                  | 494    | -      | -     | -      | -    | -    |
| Approach                 | EB     | NB     |       | SB     |      |      |
| HCM Control Delay, s     | 68.2   | 0.8    |       | 0      |      |      |
| HCM LOS                  | F      |        |       |        |      |      |
| Minor Lane/Major Mvmt    | NBL    | NBT    | EBLn1 | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)         | 231    | -      | 14    | 202    | -    | -    |
| HCM Lane V/C Ratio       | 0.134  | -      | 0.436 | 0.248  | -    | -    |
| HCM Control Delay (s)    | 23     | -      | 393.1 | 28.6   | -    | -    |
| HCM Lane LOS             | C      | -      | F     | D      | -    | -    |
| HCM 95th %tile Q(veh)    | 0.5    | -      | 1.1   | 0.9    | -    | -    |

## Lanier Tract DRI

## 5: GA 53 &amp; Lanier Valley Dr/Ahaluna Dr

existing a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Volume (vph)               | 19                                                                                | 5                                                                                 | 115                                                                               | 37                                                                                | 3                                                                                 | 20                                                                                | 55                                                                                  | 701                                                                                 | 11                                                                                  | 14                                                                                  | 1901                                                                                | 0                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 2%                                                                                |                                                                                   |                                                                                   | -4%                                                                               |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 100                                                                                 |                                                                                     | 0                                                                                   | 140                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.888                                                                             |                                                                                   |                                                                                   | 0.956                                                                             |                                                                                   |                                                                                     | 0.998                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   | 0.993                                                                             |                                                                                   |                                                                                   | 0.970                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1659                                                                              | 0                                                                                 | 0                                                                                 | 1797                                                                              | 0                                                                                 | 1796                                                                                | 3516                                                                                | 0                                                                                   | 1814                                                                                | 3628                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.941                                                                             |                                                                                   |                                                                                   | 0.405                                                                             |                                                                                   | 0.037                                                                               |                                                                                     |                                                                                     | 0.337                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1572                                                                              | 0                                                                                 | 0                                                                                 | 750                                                                               | 0                                                                                 | 70                                                                                  | 3516                                                                                | 0                                                                                   | 644                                                                                 | 3628                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 86                                                                                |                                                                                   |                                                                                   | 13                                                                                |                                                                                   |                                                                                     | 4                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 340                                                                               |                                                                                   |                                                                                   | 322                                                                               |                                                                                   |                                                                                     | 888                                                                                 |                                                                                     |                                                                                     | 1417                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.7                                                                               |                                                                                   |                                                                                   | 7.3                                                                               |                                                                                   |                                                                                     | 13.5                                                                                |                                                                                     |                                                                                     | 21.5                                                                                |                                                                                     |
| Peak Hour Factor           | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.83                                                                              | 0.83                                                                              | 0.83                                                                              | 0.85                                                                                | 0.85                                                                                | 0.85                                                                                | 0.87                                                                                | 0.87                                                                                | 0.87                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 21                                                                                | 5                                                                                 | 126                                                                               | 45                                                                                | 4                                                                                 | 24                                                                                | 65                                                                                  | 825                                                                                 | 13                                                                                  | 16                                                                                  | 2185                                                                                | 0                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 152                                                                               | 0                                                                                 | 0                                                                                 | 73                                                                                | 0                                                                                 | 65                                                                                  | 838                                                                                 | 0                                                                                   | 16                                                                                  | 2185                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 |                                                                                     | 0                                                                                   | 336                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   |                                                                                     | 0                                                                                   | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 8                                                                                 | 8                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 10.6                                                                                | 23.0                                                                                |                                                                                     | 23.0                                                                                | 23.0                                                                                |                                                                                     |

# Lanier Tract DRI

## 5: GA 53 & Lanier Valley Dr/Ahaluna Dr

existing a.m.

|                       |  |       |     |       |       |     |       |       |     |       |       |     |
|-----------------------|------------------------------------------------------------------------------------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Lane Group            | EBL                                                                                | EBT   | EBR | WBL   | WBT   | WBR | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
| Total Split (s)       | 25.0                                                                               | 25.0  |     | 25.0  | 25.0  |     | 13.0  | 125.0 |     | 112.0 | 112.0 |     |
| Total Split (%)       | 16.7%                                                                              | 16.7% |     | 16.7% | 16.7% |     | 8.7%  | 83.3% |     | 74.7% | 74.7% |     |
| Maximum Green (s)     | 18.4                                                                               | 18.4  |     | 18.4  | 18.4  |     | 7.4   | 118.9 |     | 105.9 | 105.9 |     |
| Yellow Time (s)       | 4.0                                                                                | 4.0   |     | 4.0   | 4.0   |     | 3.0   | 4.5   |     | 4.5   | 4.5   |     |
| All-Red Time (s)      | 2.6                                                                                | 2.6   |     | 2.6   | 2.6   |     | 2.6   | 1.6   |     | 1.6   | 1.6   |     |
| Lost Time Adjust (s)  |                                                                                    | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Lost Time (s)   |                                                                                    | 6.6   |     |       | 6.6   |     | 5.6   | 6.1   |     | 6.1   | 6.1   |     |
| Lead/Lag              |                                                                                    |       |     |       |       |     | Lead  |       |     | Lag   | Lag   |     |
| Lead-Lag Optimize?    |                                                                                    |       |     |       |       |     | Yes   |       |     | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0                                                                                | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode           | None                                                                               | None  |     | None  | None  |     | None  | C-Max |     | C-Max | C-Max |     |
| Act Effect Green (s)  |                                                                                    | 14.0  |     |       | 14.0  |     | 123.8 | 123.3 |     | 113.3 | 113.3 |     |
| Actuated g/C Ratio    |                                                                                    | 0.09  |     |       | 0.09  |     | 0.83  | 0.82  |     | 0.76  | 0.76  |     |
| v/c Ratio             |                                                                                    | 0.68  |     |       | 0.90  |     | 0.49  | 0.29  |     | 0.03  | 0.80  |     |
| Control Delay         |                                                                                    | 43.6  |     |       | 127.8 |     | 44.3  | 1.5   |     | 6.6   | 15.9  |     |
| Queue Delay           |                                                                                    | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay           |                                                                                    | 43.6  |     |       | 127.8 |     | 44.3  | 1.5   |     | 6.6   | 15.9  |     |
| LOS                   |                                                                                    | D     |     |       | F     |     | D     | A     |     | A     | B     |     |
| Approach Delay        |                                                                                    | 43.6  |     |       | 127.8 |     |       | 4.6   |     |       | 15.9  |     |
| Approach LOS          |                                                                                    | D     |     |       | F     |     |       | A     |     |       | B     |     |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 26 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 16.5

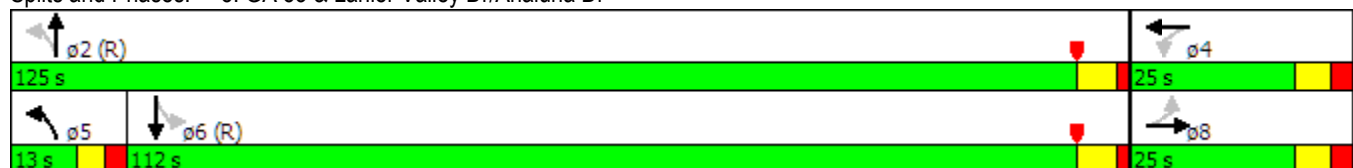
Intersection LOS: B

Intersection Capacity Utilization 73.2%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 5: GA 53 & Lanier Valley Dr/Ahaluna Dr



## Lanier Tract DRI

## 6: 53-Dawsonville Hwy &amp; Academy Sports

existing a.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |  |  |  |  |  |  |  |
| Volume (vph)               | 2                                                                                 | 0                                                                                 | 6                                                                                 | 2                                                                                 | 0                                                                                 | 0                                                                                 | 11                                                                                  | 740                                                                                 | 9                                                                                   | 5                                                                                   | 1989                                                                                | 4                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 4%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 70                                                                                | 200                                                                                 |                                                                                     | 170                                                                                 | 190                                                                                 |                                                                                     | 360                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1805                                                                              | 1900                                                                              | 1615                                                                              | 1769                                                                              | 1862                                                                              | 1862                                                                              | 1796                                                                                | 3556                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 0.058                                                                               |                                                                                     |                                                                                     | 0.329                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1900                                                                              | 1900                                                                              | 1615                                                                              | 1862                                                                              | 1862                                                                              | 1862                                                                              | 110                                                                                 | 3556                                                                                | 1607                                                                                | 625                                                                                 | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 67                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 68                                                                                  |                                                                                     |                                                                                     | 68                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 262                                                                               |                                                                                   |                                                                                   | 246                                                                               |                                                                                   |                                                                                     | 1836                                                                                |                                                                                     |                                                                                     | 685                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.1                                                                               |                                                                                   |                                                                                   | 6.7                                                                               |                                                                                   |                                                                                     | 27.8                                                                                |                                                                                     |                                                                                     | 10.4                                                                                |                                                                                     |
| Peak Hour Factor           | 0.67                                                                              | 0.67                                                                              | 0.67                                                                              | 0.50                                                                              | 0.50                                                                              | 0.50                                                                              | 0.86                                                                                | 0.86                                                                                | 0.86                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 3                                                                                 | 0                                                                                 | 9                                                                                 | 4                                                                                 | 0                                                                                 | 0                                                                                 | 13                                                                                  | 860                                                                                 | 10                                                                                  | 6                                                                                   | 2210                                                                                | 4                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 3                                                                                 | 0                                                                                 | 9                                                                                 | 4                                                                                 | 0                                                                                 | 0                                                                                 | 13                                                                                  | 860                                                                                 | 10                                                                                  | 6                                                                                   | 2210                                                                                | 4                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              |                                                                                   | Perm                                                                              | Perm                                                                              |                                                                                   | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 2                                                                                   |                                                                                     | 2                                                                                   | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 42.0                                                                              | 42.0                                                                              | 42.0                                                                              | 42.4                                                                              | 42.4                                                                              | 42.4                                                                              | 11.4                                                                                | 30.3                                                                                | 30.3                                                                                | 11.0                                                                                | 29.3                                                                                | 29.3                                                                                |

# Lanier Tract DRI

## 6: 53-Dawsonville Hwy & Academy Sports

existing a.m.

| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Total Split (s)         | 42.4  | 42.4  | 42.4  | 42.4  | 42.4  | 42.4  | 11.4  | 96.6  | 96.6  | 11.0  | 96.2  | 96.2  |
| Total Split (%)         | 28.3% | 28.3% | 28.3% | 28.3% | 28.3% | 28.3% | 7.6%  | 64.4% | 64.4% | 7.3%  | 64.1% | 64.1% |
| Maximum Green (s)       | 36.0  | 36.0  | 36.0  | 36.0  | 36.0  | 36.0  | 5.0   | 90.4  | 90.4  | 5.0   | 90.0  | 90.0  |
| Yellow Time (s)         | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 4.3   | 4.3   | 3.0   | 4.3   | 4.3   |
| All-Red Time (s)        | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 1.9   | 1.9   | 3.0   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.2   | 6.2   | 6.0   | 6.2   | 6.2   |
| Lead/Lag                |       |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None  | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 23.0  | 23.0  | 23.0  | 32.0  | 32.0  | 32.0  |       | 20.0  | 20.0  |       | 19.0  | 19.0  |
| Pedestrian Calls (#/hr) | 0     | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    | 6.1   |       | 6.1   | 6.1   |       |       | 137.2 | 139.9 | 139.9 | 136.1 | 137.4 | 137.4 |
| Actuated g/C Ratio      | 0.04  |       | 0.04  | 0.04  |       |       | 0.91  | 0.93  | 0.93  | 0.91  | 0.92  | 0.92  |
| v/c Ratio               | 0.04  |       | 0.07  | 0.05  |       |       | 0.08  | 0.26  | 0.01  | 0.01  | 0.67  | 0.00  |
| Control Delay           | 69.5  |       | 1.0   | 70.0  |       |       | 1.5   | 0.8   | 0.0   | 1.0   | 1.8   | 0.0   |
| Queue Delay             | 0.0   |       | 0.0   | 0.0   |       |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay             | 69.5  |       | 1.0   | 70.0  |       |       | 1.5   | 0.8   | 0.0   | 1.0   | 1.9   | 0.0   |
| LOS                     | E     |       | A     | E     |       |       | A     | A     | A     | A     | A     | A     |
| Approach Delay          |       |       |       |       |       |       |       | 0.8   |       |       | 1.8   |       |
| Approach LOS            |       |       |       |       |       |       |       | A     |       |       | A     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 27 (18%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 145

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.67

Intersection Signal Delay: 1.7

Intersection LOS: A

Intersection Capacity Utilization 79.1%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 6: 53-Dawsonville Hwy & Academy Sports

|        |    |        |        |        |    |
|--------|----|--------|--------|--------|----|
|        | ø1 |        | ø2 (R) |        | ø4 |
| 11 s   |    | 96.6 s |        | 42.4 s |    |
|        | ø5 |        | ø6 (R) |        | ø8 |
| 11.4 s |    | 96.2 s |        | 42.4 s |    |

## Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 &amp; McEver Road/McEver

existing a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |                                                                                   |   |  |  |  |  |  |
| Volume (vph)               | 390                                                                               | 28                                                                                | 342                                                                               | 42                                                                                | 19                                                                                | 18                                                                                | 282                                                                                 | 465                                                                                 | 55                                                                                  | 28                                                                                  | 1170                                                                                | 828                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 1%                                                                                |                                                                                   |                                                                                   | 5%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 180                                                                               |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 310                                                                                 |                                                                                     | 185                                                                                 | 255                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 50                                                                                |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.872                                                                             | 0.850                                                                             |                                                                                   | 0.927                                                                             |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 3484                                                                              | 1566                                                                              | 1527                                                                              | 1760                                                                              | 1717                                                                              | 0                                                                                 | 3484                                                                                | 3487                                                                                | 1575                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   | 0.629                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 3484                                                                              | 1566                                                                              | 1527                                                                              | 1165                                                                              | 1717                                                                              | 0                                                                                 | 3484                                                                                | 3487                                                                                | 1575                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 166                                                                               | 187                                                                               |                                                                                   | 29                                                                                |                                                                                   |                                                                                     |                                                                                     | 184                                                                                 |                                                                                     |                                                                                     | 538                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 45                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 580                                                                               |                                                                                   |                                                                                   | 331                                                                               |                                                                                   |                                                                                     | 921                                                                                 |                                                                                     |                                                                                     | 1624                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 8.8                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                     | 14.0                                                                                |                                                                                     |                                                                                     | 24.6                                                                                |                                                                                     |
| Peak Hour Factor           | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.62                                                                              | 0.62                                                                              | 0.62                                                                              | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 3%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 402                                                                               | 29                                                                                | 353                                                                               | 68                                                                                | 31                                                                                | 29                                                                                | 303                                                                                 | 500                                                                                 | 59                                                                                  | 31                                                                                  | 1300                                                                                | 920                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   | 47%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 402                                                                               | 195                                                                               | 187                                                                               | 68                                                                                | 60                                                                                | 0                                                                                 | 303                                                                                 | 500                                                                                 | 59                                                                                  | 31                                                                                  | 1300                                                                                | 920                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 24                                                                                |                                                                                   |                                                                                   | 24                                                                                |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                             | NA                                                                                |                                                                                   | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 8                                                                                 |                                                                                   | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 8                                                                                 | 8                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 13.2                                                                              | 50.2                                                                              | 50.2                                                                              | 11.6                                                                              | 48.2                                                                              |                                                                                   | 13.4                                                                                | 35.6                                                                                | 35.6                                                                                | 12.9                                                                                | 44.6                                                                                | 44.6                                                                                |

# Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 & McEver Road/McEver

existing a.m.

|                         |  |       |       |      |       |     |       |       |       |      |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|------|-------|-----|-------|-------|-------|------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL  | WBT   | WBR | NBL   | NBT   | NBR   | SBL  | SBT   | SBR   |
| Total Split (s)         | 24.0                                                                               | 60.4  | 60.4  | 11.8 | 48.2  |     | 20.2  | 63.9  | 63.9  | 13.9 | 57.6  | 57.6  |
| Total Split (%)         | 16.0%                                                                              | 40.3% | 40.3% | 7.9% | 32.1% |     | 13.5% | 42.6% | 42.6% | 9.3% | 38.4% | 38.4% |
| Maximum Green (s)       | 16.7                                                                               | 53.1  | 53.1  | 5.3  | 40.9  |     | 12.7  | 57.3  | 57.3  | 6.7  | 51.0  | 51.0  |
| Yellow Time (s)         | 4.3                                                                                | 4.3   | 4.3   | 3.5  | 4.3   |     | 4.5   | 4.4   | 4.4   | 4.2  | 4.4   | 4.4   |
| All-Red Time (s)        | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 2.2   | 2.2   | 3.0  | 2.2   | 2.2   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Lost Time (s)     | 7.3                                                                                | 7.3   | 7.3   | 6.5  | 7.3   |     | 7.5   | 6.6   | 6.6   | 7.2  | 6.6   | 6.6   |
| Lead/Lag                | Lead                                                                               | Lag   | Lag   | Lead | Lag   |     | Lag   | Lag   | Lag   | Lead | Lead  | Lead  |
| Lead-Lag Optimize?      | Yes                                                                                | Yes   | Yes   | Yes  | Yes   |     | Yes   | Yes   | Yes   | Yes  | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None | None  |     | None  | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s)           |                                                                                    | 4.0   | 4.0   |      | 4.0   |     |       | 4.0   | 4.0   |      | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    | 38.0  | 38.0  |      | 36.0  |     |       | 25.0  | 25.0  |      | 34.0  | 34.0  |
| Pedestrian Calls (#/hr) |                                                                                    | 0     | 0     |      | 0     |     |       | 0     | 0     |      | 0     | 0     |
| Act Effect Green (s)    | 16.7                                                                               | 20.5  | 20.5  | 13.3 | 8.5   |     | 12.7  | 96.3  | 96.3  | 8.0  | 86.0  | 86.0  |
| Actuated g/C Ratio      | 0.11                                                                               | 0.14  | 0.14  | 0.09 | 0.06  |     | 0.08  | 0.64  | 0.64  | 0.05 | 0.57  | 0.57  |
| v/c Ratio               | 1.04                                                                               | 0.55  | 0.51  | 0.55 | 0.48  |     | 1.03  | 0.22  | 0.05  | 0.32 | 0.63  | 0.79  |
| Control Delay           | 119.1                                                                              | 18.3  | 12.1  | 67.7 | 51.5  |     | 133.7 | 17.6  | 1.2   | 85.8 | 19.6  | 11.3  |
| Queue Delay             | 0.0                                                                                | 0.0   | 0.0   | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Delay             | 119.1                                                                              | 18.3  | 12.1  | 67.7 | 51.5  |     | 133.7 | 17.6  | 1.2   | 85.8 | 19.6  | 11.3  |
| LOS                     | F                                                                                  | B     | B     | E    | D     |     | F     | B     | A     | F    | B     | B     |
| Approach Delay          |                                                                                    | 68.5  |       |      | 60.1  |     |       | 57.3  |       |      | 17.1  |       |
| Approach LOS            |                                                                                    | E     |       |      | E     |     |       | E     |       |      | B     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 19 (13%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.04

Intersection Signal Delay: 37.1

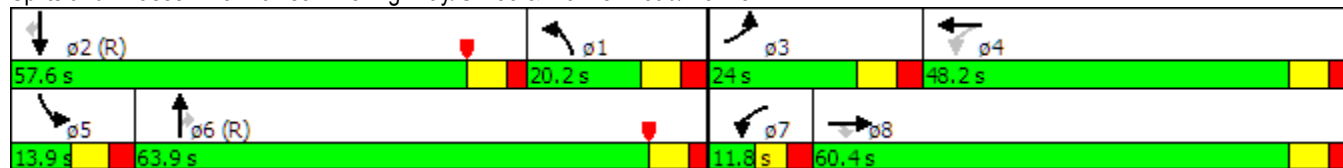
Intersection LOS: D

Intersection Capacity Utilization 81.3%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 8: Dawsonville Highway/GA 53 & McEver Road/McEver





## Lanier Tract DRI

## 9: Dawsonville Highway &amp; Greenhill Circle/Greenhill Circle

existing a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 67                                                                                | 1                                                                                 | 141                                                                               | 6                                                                                 | 1                                                                                 | 4                                                                                 | 135                                                                                 | 754                                                                                 | 10                                                                                  | 12                                                                                  | 1404                                                                                | 52                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 3%                                                                                |                                                                                   |                                                                                   | 7%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 190                                                                                 |                                                                                     | 190                                                                                 | 185                                                                                 |                                                                                     | 100                                                                                 |
| Storage Lanes              | 0                                                                                 |                                                                                   | 1                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              |                                                                                   | 0.953                                                                             |                                                                                   |                                                                                   | 0.957                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1784                                                                              | 1591                                                                              | 0                                                                                 | 1755                                                                              | 1558                                                                              | 1796                                                                                | 3522                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   | 0.722                                                                             |                                                                                   |                                                                                   | 0.755                                                                             |                                                                                   | 0.116                                                                               |                                                                                     |                                                                                     | 0.324                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1351                                                                              | 1591                                                                              | 0                                                                                 | 1384                                                                              | 1558                                                                              | 219                                                                                 | 3522                                                                                | 1607                                                                                | 616                                                                                 | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 151                                                                               |                                                                                   |                                                                                   | 102                                                                               |                                                                                     |                                                                                     | 57                                                                                  |                                                                                     |                                                                                     | 101                                                                                 |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 288                                                                               |                                                                                   |                                                                                   | 254                                                                               |                                                                                   |                                                                                     | 778                                                                                 |                                                                                     |                                                                                     | 921                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.9                                                                               |                                                                                   |                                                                                   | 6.9                                                                               |                                                                                   |                                                                                     | 11.8                                                                                |                                                                                     |                                                                                     | 14.0                                                                                |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.69                                                                              | 0.69                                                                              | 0.69                                                                              | 0.86                                                                                | 0.86                                                                                | 0.86                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 74                                                                                | 1                                                                                 | 157                                                                               | 9                                                                                 | 1                                                                                 | 6                                                                                 | 157                                                                                 | 877                                                                                 | 12                                                                                  | 13                                                                                  | 1526                                                                                | 57                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 75                                                                                | 157                                                                               | 0                                                                                 | 10                                                                                | 6                                                                                 | 157                                                                                 | 877                                                                                 | 12                                                                                  | 13                                                                                  | 1526                                                                                | 57                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.02                                                                              | 1.02                                                                              | 1.02                                                                              | 1.05                                                                              | 1.05                                                                              | 1.05                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              | 23.0                                                                              | 39.9                                                                              | 39.9                                                                              | 39.9                                                                              | 11.0                                                                                | 28.0                                                                                | 28.0                                                                                | 10.0                                                                                | 36.0                                                                                | 36.0                                                                                |

# Lanier Tract DRI

## 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle

existing a.m.

|                         |  |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 39.9                                                                               | 39.9  | 39.9  | 39.9  | 39.9  | 39.9  | 22.0  | 100.1 | 100.1 | 10.0  | 88.1  | 88.1  |
| Total Split (%)         | 26.6%                                                                              | 26.6% | 26.6% | 26.6% | 26.6% | 26.6% | 14.7% | 66.7% | 66.7% | 6.7%  | 58.7% | 58.7% |
| Maximum Green (s)       | 34.0                                                                               | 34.0  | 34.0  | 34.0  | 34.0  | 34.0  | 16.0  | 94.1  | 94.1  | 5.0   | 82.1  | 82.1  |
| Yellow Time (s)         | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 4.4   | 4.4   | 3.5   | 4.4   | 4.4   |
| All-Red Time (s)        | 2.9                                                                                | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 3.0   | 1.6   | 1.6   | 1.5   | 1.6   | 1.6   |
| Lost Time Adjust (s)    |                                                                                    | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |                                                                                    | 5.9   | 5.9   |       | 5.9   | 5.9   | 6.0   | 6.0   | 6.0   | 5.0   | 6.0   | 6.0   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           |                                                                                    |       |       | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    |       |       | 30.0  | 30.0  | 30.0  |       | 18.0  | 18.0  |       | 26.0  | 26.0  |
| Pedestrian Calls (#/hr) |                                                                                    |       |       | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    |                                                                                    | 13.7  | 13.7  |       | 13.7  | 13.7  | 124.4 | 120.0 | 120.0 | 113.0 | 106.3 | 106.3 |
| Actuated g/C Ratio      |                                                                                    | 0.09  | 0.09  |       | 0.09  | 0.09  | 0.83  | 0.80  | 0.80  | 0.75  | 0.71  | 0.71  |
| v/c Ratio               |                                                                                    | 0.61  | 0.56  |       | 0.08  | 0.03  | 0.51  | 0.31  | 0.01  | 0.03  | 0.60  | 0.05  |
| Control Delay           |                                                                                    | 85.1  | 17.7  |       | 60.9  | 0.2   | 17.8  | 4.2   | 0.0   | 3.6   | 11.3  | 0.4   |
| Queue Delay             |                                                                                    | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay             |                                                                                    | 85.1  | 17.7  |       | 60.9  | 0.2   | 17.8  | 4.2   | 0.0   | 3.6   | 11.4  | 0.4   |
| LOS                     |                                                                                    | F     | B     |       | E     | A     | B     | A     | A     | A     | B     | A     |
| Approach Delay          |                                                                                    | 39.5  |       |       | 38.1  |       |       | 6.2   |       |       | 10.9  |       |
| Approach LOS            |                                                                                    | D     |       |       | D     |       |       | A     |       |       | B     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.61

Intersection Signal Delay: 11.6

Intersection LOS: B

Intersection Capacity Utilization 71.6%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle



## Lanier Tract DRI

## 10: Dawsonville Highway &amp; Shallowford Rd/Best Buy

existing a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |                                                                                   |  |  |    |  |  |  |  |  |
| Volume (vph)               | 138                                                                               | 2                                                                                 | 8                                                                                 | 2                                                                                 | 4                                                                                 | 3                                                                                 | 10                                                                                  | 738                                                                                 | 13                                                                                  | 1                                                                                   | 1249                                                                                | 338                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | -1%                                                                               |                                                                                   |                                                                                   | 10%                                                                               |                                                                                   |                                                                                     | -4%                                                                                 |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 350                                                                               |                                                                                   | 350                                                                               | 0                                                                                 |                                                                                   | 0                                                                                 | 350                                                                                 |                                                                                     | 150                                                                                 | 265                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 100                                                                               |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             | 0.953                                                                             |                                                                                   |                                                                                   | 0.982                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1723                                                                              | 1729                                                                              | 1623                                                                              | 0                                                                                 | 1773                                                                              | 1534                                                                              | 1841                                                                                | 3646                                                                                | 1647                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             | 0.953                                                                             |                                                                                   |                                                                                   | 0.982                                                                             |                                                                                   | 0.154                                                                               |                                                                                     |                                                                                     | 0.320                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1723                                                                              | 1729                                                                              | 1623                                                                              | 0                                                                                 | 1773                                                                              | 1534                                                                              | 298                                                                                 | 3646                                                                                | 1647                                                                                | 611                                                                                 | 3592                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 113                                                                               |                                                                                   |                                                                                   | 119                                                                               |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     | 218                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 653                                                                               |                                                                                   |                                                                                   | 178                                                                               |                                                                                   |                                                                                     | 957                                                                                 |                                                                                     |                                                                                     | 778                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 9.9                                                                               |                                                                                   |                                                                                   | 4.9                                                                               |                                                                                   |                                                                                     | 14.5                                                                                |                                                                                     |                                                                                     | 11.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.84                                                                              | 0.84                                                                              | 0.84                                                                              | 0.56                                                                              | 0.56                                                                              | 0.56                                                                              | 0.83                                                                                | 0.83                                                                                | 0.83                                                                                | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 164                                                                               | 2                                                                                 | 10                                                                                | 4                                                                                 | 7                                                                                 | 5                                                                                 | 12                                                                                  | 889                                                                                 | 16                                                                                  | 1                                                                                   | 1343                                                                                | 363                                                                                 |
| Shared Lane Traffic (%)    | 49%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 84                                                                                | 82                                                                                | 10                                                                                | 0                                                                                 | 11                                                                                | 5                                                                                 | 12                                                                                  | 889                                                                                 | 16                                                                                  | 1                                                                                   | 1343                                                                                | 363                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 0.99                                                                              | 0.99                                                                              | 0.99                                                                              | 1.07                                                                              | 1.07                                                                              | 1.07                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Split                                                                             | NA                                                                                | Perm                                                                              | Split                                                                             | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | Perm                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 3                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 3                                                                                 | 3                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 36.7                                                                              | 36.7                                                                              | 36.7                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                                | 28.8                                                                                | 28.8                                                                                | 30.8                                                                                | 30.8                                                                                | 30.8                                                                                |

# Lanier Tract DRI

## 10: Dawsonville Highway & Shallowford Rd/Best Buy

existing a.m.

|                         |  |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 36.7                                                                               | 36.7  | 36.7  | 38.9  | 38.9  | 38.9  | 10.8  | 74.4  | 74.4  | 63.6  | 63.6  | 63.6  |
| Total Split (%)         | 24.5%                                                                              | 24.5% | 24.5% | 25.9% | 25.9% | 25.9% | 7.2%  | 49.6% | 49.6% | 42.4% | 42.4% | 42.4% |
| Maximum Green (s)       | 30.0                                                                               | 30.0  | 30.0  | 33.0  | 33.0  | 33.0  | 5.0   | 67.6  | 67.6  | 56.8  | 56.8  | 56.8  |
| Yellow Time (s)         | 4.5                                                                                | 4.5   | 4.5   | 3.0   | 3.0   | 3.0   | 3.0   | 4.9   | 4.9   | 4.9   | 4.9   | 4.9   |
| All-Red Time (s)        | 2.2                                                                                | 2.2   | 2.2   | 2.9   | 2.9   | 2.9   | 2.8   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.7                                                                                | 6.7   | 6.7   |       | 5.9   | 5.9   | 5.8   | 6.8   | 6.8   | 6.8   | 6.8   | 6.8   |
| Lead/Lag                | Lead                                                                               | Lead  | Lead  | Lag   | Lag   | Lag   | Lead  |       |       | Lag   | Lag   | Lag   |
| Lead-Lag Optimize?      | Yes                                                                                | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |       |       | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Min | C-Min | C-Min | C-Min | C-Min |
| Walk Time (s)           | 4.0                                                                                | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 26.0                                                                               | 26.0  | 26.0  | 29.0  | 29.0  | 29.0  |       | 18.0  | 18.0  | 20.0  | 20.0  | 20.0  |
| Pedestrian Calls (#/hr) | 0                                                                                  | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     | 0     | 0     | 0     |
| Act Effect Green (s)    | 12.7                                                                               | 12.7  | 12.7  |       | 6.5   | 6.5   | 119.4 | 118.4 | 118.4 | 113.7 | 113.7 | 113.7 |
| Actuated g/C Ratio      | 0.08                                                                               | 0.08  | 0.08  |       | 0.04  | 0.04  | 0.80  | 0.79  | 0.79  | 0.76  | 0.76  | 0.76  |
| v/c Ratio               | 0.58                                                                               | 0.56  | 0.04  |       | 0.14  | 0.03  | 0.04  | 0.31  | 0.01  | 0.00  | 0.49  | 0.28  |
| Control Delay           | 81.0                                                                               | 79.9  | 0.4   |       | 72.5  | 0.3   | 5.5   | 5.6   | 0.0   | 7.0   | 6.7   | 3.5   |
| Queue Delay             | 0.0                                                                                | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.2   | 0.0   |
| Total Delay             | 81.0                                                                               | 79.9  | 0.4   |       | 72.5  | 0.3   | 5.5   | 5.6   | 0.0   | 7.0   | 6.9   | 3.5   |
| LOS                     | F                                                                                  | E     | A     |       | E     | A     | A     | A     | A     | A     | A     | A     |
| Approach Delay          |                                                                                    | 75.9  |       |       | 49.9  |       |       | 5.5   |       |       | 6.2   |       |
| Approach LOS            |                                                                                    | E     |       |       | D     |       |       | A     |       |       | A     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 45 (30%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 10.6

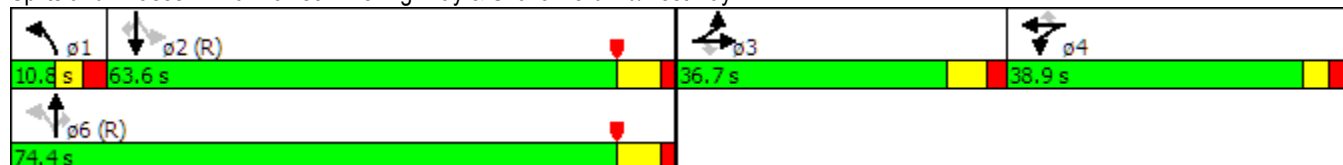
Intersection LOS: B

Intersection Capacity Utilization 59.0%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 10: Dawsonville Highway & Shallowford Rd/Best Buy



Lanier Tract DRI  
1: Sportsman Club Road & Strickland Drive

existing p.m.

| Intersection             |        |       |        |      |        |      |
|--------------------------|--------|-------|--------|------|--------|------|
| Int Delay, s/veh         | 1.6    |       |        |      |        |      |
|                          |        |       |        |      |        |      |
| Movement                 | WBL    | WBR   | NBT    | NBR  | SBL    | SBT  |
| Vol, veh/h               | 7      | 0     | 29     | 9    | 0      | 23   |
| Conflicting Peds, #/hr   | 0      | 0     | 0      | 0    | 0      | 0    |
| Sign Control             | Stop   | Stop  | Free   | Free | Free   | Free |
| RT Channelized           | -      | None  | -      | None | -      | None |
| Storage Length           | 0      | -     | -      | -    | -      | -    |
| Veh in Median Storage, # | 0      | -     | 0      | -    | -      | 0    |
| Grade, %                 | 0      | -     | 0      | -    | -      | 0    |
| Peak Hour Factor         | 44     | 44    | 86     | 86   | 82     | 82   |
| Heavy Vehicles, %        | 2      | 2     | 2      | 2    | 2      | 2    |
| Mvmt Flow                | 16     | 0     | 34     | 10   | 0      | 28   |
|                          |        |       |        |      |        |      |
| Major/Minor              | Minor1 |       | Major1 |      | Major2 |      |
| Conflicting Flow All     | 67     | 39    | 0      | 0    | 44     | 0    |
| Stage 1                  | 39     | -     | -      | -    | -      | -    |
| Stage 2                  | 28     | -     | -      | -    | -      | -    |
| Critical Hdwy            | 6.42   | 6.22  | -      | -    | 4.12   | -    |
| Critical Hdwy Stg 1      | 5.42   | -     | -      | -    | -      | -    |
| Critical Hdwy Stg 2      | 5.42   | -     | -      | -    | -      | -    |
| Follow-up Hdwy           | 3.518  | 3.318 | -      | -    | 2.218  | -    |
| Pot Cap-1 Maneuver       | 938    | 1033  | -      | -    | 1564   | -    |
| Stage 1                  | 983    | -     | -      | -    | -      | -    |
| Stage 2                  | 995    | -     | -      | -    | -      | -    |
| Platoon blocked, %       |        |       | -      | -    |        | -    |
| Mov Cap-1 Maneuver       | 938    | 1033  | -      | -    | 1564   | -    |
| Mov Cap-2 Maneuver       | 938    | -     | -      | -    | -      | -    |
| Stage 1                  | 983    | -     | -      | -    | -      | -    |
| Stage 2                  | 995    | -     | -      | -    | -      | -    |
|                          |        |       |        |      |        |      |
| Approach                 | WB     | NB    |        | SB   |        |      |
| HCM Control Delay, s     | 8.9    | 0     |        | 0    |        |      |
| HCM LOS                  | A      |       |        |      |        |      |
|                          |        |       |        |      |        |      |
| Minor Lane/Major Mvmt    | NBT    | NBR   | WBLn1  | SBL  | SBT    |      |
| Capacity (veh/h)         | -      | -     | 938    | 1564 | -      |      |
| HCM Lane V/C Ratio       | -      | -     | 0.017  | -    | -      |      |
| HCM Control Delay (s)    | -      | -     | 8.9    | 0    | -      |      |
| HCM Lane LOS             | -      | -     | A      | A    | -      |      |
| HCM 95th %tile Q(veh)    | -      | -     | 0.1    | 0    | -      |      |

Lanier Tract DRI  
2: GA 53 & Sportsman Club Road

existing p.m.

| Intersection     |      |  |  |  |  |  |  |  |  |  |  |  |
|------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Int Delay, s/veh | 17.3 |  |  |  |  |  |  |  |  |  |  |  |

| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol, veh/h               | 15   | 1039 | 0    | 2    | 1671 | 19   | 0    | 0    | 0    | 28   | 0    | 9    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 95   | 95   | 95   | 96   | 96   | 96   | 92   | 92   | 92   | 66   | 66   | 66   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 16   | 1094 | 0    | 2    | 1741 | 20   | 0    | 0    | 0    | 42   | 0    | 14   |

| Major/Minor          | Major1 |   |   | Major2 |   |   | Minor1 |      |      | Minor2 |      |      |
|----------------------|--------|---|---|--------|---|---|--------|------|------|--------|------|------|
| Conflicting Flow All | 1760   | 0 | 0 | 1094   | 0 | 0 | 1999   | 2890 | 547  | 2333   | 2880 | 880  |
| Stage 1              | -      | - | - | -      | - | - | 1125   | 1125 | -    | 1755   | 1755 | -    |
| Stage 2              | -      | - | - | -      | - | - | 874    | 1765 | -    | 578    | 1125 | -    |
| Critical Hdwy        | 4.14   | - | - | 4.14   | - | - | 7.54   | 6.54 | 6.94 | 7.54   | 6.54 | 6.94 |
| Critical Hdwy Stg 1  | -      | - | - | -      | - | - | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    |
| Critical Hdwy Stg 2  | -      | - | - | -      | - | - | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    |
| Follow-up Hdwy       | 2.22   | - | - | 2.22   | - | - | 3.52   | 4.02 | 3.32 | 3.52   | 4.02 | 3.32 |
| Pot Cap-1 Maneuver   | 351    | - | - | 634    | - | - | 35     | 16   | 481  | ~ 20   | 16   | 290  |
| Stage 1              | -      | - | - | -      | - | - | 218    | 278  | -    | 88     | 137  | -    |
| Stage 2              | -      | - | - | -      | - | - | 311    | 136  | -    | 468    | 278  | -    |
| Platoon blocked, %   | -      | - | - | -      | - | - | -      | -    | -    | -      | -    | -    |
| Mov Cap-1 Maneuver   | 351    | - | - | 634    | - | - | 32     | 15   | 481  | ~ 19   | 15   | 290  |
| Mov Cap-2 Maneuver   | -      | - | - | -      | - | - | 32     | 15   | -    | ~ 19   | 15   | -    |
| Stage 1              | -      | - | - | -      | - | - | 208    | 265  | -    | 84     | 137  | -    |
| Stage 2              | -      | - | - | -      | - | - | 295    | 136  | -    | 447    | 265  | -    |

| Approach             | EB  | WB | NB | SB       |
|----------------------|-----|----|----|----------|
| HCM Control Delay, s | 0.2 | 0  | 0  | \$ 901.3 |
| HCM LOS              |     |    | A  | F        |

| Minor Lane/Major Mvmt | NBLn1 | EBL   | EBT | EBR | WBL   | WBT | WBR | SBLn1    |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|----------|
| Capacity (veh/h)      | -     | 351   | -   | -   | 634   | -   | -   | 25       |
| HCM Lane V/C Ratio    | -     | 0.045 | -   | -   | 0.003 | -   | -   | 2.242    |
| HCM Control Delay (s) | 0     | 15.7  | -   | -   | 10.7  | -   | -   | \$ 901.3 |
| HCM Lane LOS          | A     | C     | -   | -   | B     | -   | -   | F        |
| HCM 95th %tile Q(veh) | -     | 0.1   | -   | -   | 0     | -   | -   | 6.9      |

| Notes                                                                                                                |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |  |  |  |  |  |  |  |  |  |  |  |  |

| Intersection             |        |        |       |        |      |      |
|--------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh         | 1.2    |        |       |        |      |      |
|                          |        |        |       |        |      |      |
| Movement                 | EBL    | EBR    | NBL   | NBT    | SBT  | SBR  |
| Vol, veh/h               | 11     | 47     | 62    | 1650   | 1104 | 14   |
| Conflicting Peds, #/hr   | 0      | 0      | 0     | 0      | 0    | 0    |
| Sign Control             | Stop   | Stop   | Free  | Free   | Free | Free |
| RT Channelized           | -      | None   | -     | None   | -    | None |
| Storage Length           | 0      | 0      | 0     | -      | -    | 0    |
| Veh in Median Storage, # | 0      | -      | -     | 0      | 0    | -    |
| Grade, %                 | 0      | -      | -     | 0      | 0    | -    |
| Peak Hour Factor         | 76     | 76     | 95    | 95     | 100  | 100  |
| Heavy Vehicles, %        | 2      | 2      | 2     | 2      | 2    | 2    |
| Mvmt Flow                | 14     | 62     | 65    | 1737   | 1104 | 14   |
|                          |        |        |       |        |      |      |
| Major/Minor              | Minor2 | Major1 |       | Major2 |      |      |
| Conflicting Flow All     | 2103   | 552    | 1104  | 0      | -    | 0    |
| Stage 1                  | 1104   | -      | -     | -      | -    | -    |
| Stage 2                  | 999    | -      | -     | -      | -    | -    |
| Critical Hdwy            | 6.84   | 6.94   | 4.14  | -      | -    | -    |
| Critical Hdwy Stg 1      | 5.84   | -      | -     | -      | -    | -    |
| Critical Hdwy Stg 2      | 5.84   | -      | -     | -      | -    | -    |
| Follow-up Hdwy           | 3.52   | 3.32   | 2.22  | -      | -    | -    |
| Pot Cap-1 Maneuver       | 44     | 477    | 628   | -      | -    | -    |
| Stage 1                  | 279    | -      | -     | -      | -    | -    |
| Stage 2                  | 317    | -      | -     | -      | -    | -    |
| Platoon blocked, %       |        |        |       | -      | -    | -    |
| Mov Cap-1 Maneuver       | 39     | 477    | 628   | -      | -    | -    |
| Mov Cap-2 Maneuver       | 39     | -      | -     | -      | -    | -    |
| Stage 1                  | 279    | -      | -     | -      | -    | -    |
| Stage 2                  | 284    | -      | -     | -      | -    | -    |
|                          |        |        |       |        |      |      |
| Approach                 | EB     | NB     |       | SB     |      |      |
| HCM Control Delay, s     | 38.4   | 0.4    |       | 0      |      |      |
| HCM LOS                  | E      |        |       |        |      |      |
|                          |        |        |       |        |      |      |
| Minor Lane/Major Mvmt    | NBL    | NBT    | EBLn1 | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)         | 628    | -      | 39    | 477    | -    | -    |
| HCM Lane V/C Ratio       | 0.104  | -      | 0.371 | 0.13   | -    | -    |
| HCM Control Delay (s)    | 11.4   | -      | 144.1 | 13.7   | -    | -    |
| HCM Lane LOS             | B      | -      | F     | B      | -    | -    |
| HCM 95th %tile Q(veh)    | 0.3    | -      | 1.3   | 0.4    | -    | -    |

Lanier Tract DRI  
4: Canterbury Road & GA 53

existing p.m.

| Intersection             |        |        |       |        |      |      |
|--------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh         | 1.2    |        |       |        |      |      |
| Movement                 | EBL    | EBR    | NBL   | NBT    | SBT  | SBR  |
| Vol, veh/h               | 7      | 28     | 111   | 1682   | 1105 | 14   |
| Conflicting Peds, #/hr   | 0      | 0      | 0     | 0      | 0    | 0    |
| Sign Control             | Stop   | Stop   | Free  | Free   | Free | Free |
| RT Channelized           | -      | None   | -     | None   | -    | None |
| Storage Length           | 0      | 0      | 0     | -      | -    | 0    |
| Veh in Median Storage, # | 0      | -      | -     | 0      | 0    | -    |
| Grade, %                 | 0      | -      | -     | 0      | 0    | -    |
| Peak Hour Factor         | 80     | 80     | 96    | 96     | 96   | 96   |
| Heavy Vehicles, %        | 2      | 2      | 2     | 2      | 2    | 2    |
| Mvmt Flow                | 9      | 35     | 116   | 1752   | 1151 | 15   |
| Major/Minor              | Minor2 | Major1 |       | Major2 |      |      |
| Conflicting Flow All     | 2258   | 576    | 1151  | 0      | -    | 0    |
| Stage 1                  | 1151   | -      | -     | -      | -    | -    |
| Stage 2                  | 1107   | -      | -     | -      | -    | -    |
| Critical Hdwy            | 6.84   | 6.94   | 4.14  | -      | -    | -    |
| Critical Hdwy Stg 1      | 5.84   | -      | -     | -      | -    | -    |
| Critical Hdwy Stg 2      | 5.84   | -      | -     | -      | -    | -    |
| Follow-up Hdwy           | 3.52   | 3.32   | 2.22  | -      | -    | -    |
| Pot Cap-1 Maneuver       | 35     | 460    | 603   | -      | -    | -    |
| Stage 1                  | 263    | -      | -     | -      | -    | -    |
| Stage 2                  | 278    | -      | -     | -      | -    | -    |
| Platoon blocked, %       |        |        |       | -      | -    | -    |
| Mov Cap-1 Maneuver       | 28     | 460    | 603   | -      | -    | -    |
| Mov Cap-2 Maneuver       | 28     | -      | -     | -      | -    | -    |
| Stage 1                  | 263    | -      | -     | -      | -    | -    |
| Stage 2                  | 225    | -      | -     | -      | -    | -    |
| Approach                 | EB     | NB     |       | SB     |      |      |
| HCM Control Delay, s     | 47.6   | 0.8    |       | 0      |      |      |
| HCM LOS                  | E      |        |       |        |      |      |
| Minor Lane/Major Mvmt    | NBL    | NBT    | EBLn1 | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)         | 603    | -      | 28    | 460    | -    | -    |
| HCM Lane V/C Ratio       | 0.192  | -      | 0.313 | 0.076  | -    | -    |
| HCM Control Delay (s)    | 12.4   | -      | 183.8 | 13.5   | -    | -    |
| HCM Lane LOS             | B      | -      | F     | B      | -    | -    |
| HCM 95th %tile Q(veh)    | 0.7    | -      | 1     | 0.2    | -    | -    |



Lanier Tract DRI  
7: GA 53 & Beechwood Boulevard

existing p.m.

| Intersection             |        |        |       |        |      |      |
|--------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh         | 0.7    |        |       |        |      |      |
| Movement                 | EBL    | EBR    | NBL   | NBT    | SBT  | SBR  |
| Vol, veh/h               | 1      | 47     | 86    | 1998   | 1388 | 9    |
| Conflicting Peds, #/hr   | 0      | 0      | 0     | 0      | 0    | 0    |
| Sign Control             | Stop   | Stop   | Free  | Free   | Free | Free |
| RT Channelized           | -      | Yield  | -     | Yield  | -    | None |
| Storage Length           | 0      | 0      | 200   | -      | -    | 360  |
| Veh in Median Storage, # | 0      | -      | -     | 0      | 0    | -    |
| Grade, %                 | 0      | -      | -     | 1      | 0    | -    |
| Peak Hour Factor         | 71     | 71     | 99    | 99     | 98   | 98   |
| Heavy Vehicles, %        | 0      | 0      | 0     | 0      | 1    | 0    |
| Mvmt Flow                | 1      | 66     | 87    | 2018   | 1416 | 9    |
| Major/Minor              | Minor2 | Major1 |       | Major2 |      |      |
| Conflicting Flow All     | 2599   | 709    | 1416  | 0      | -    | 0    |
| Stage 1                  | 1416   | -      | -     | -      | -    | -    |
| Stage 2                  | 1183   | -      | -     | -      | -    | -    |
| Critical Hdwy            | 6.8    | 6.9    | 4.1   | -      | -    | -    |
| Critical Hdwy Stg 1      | 5.8    | -      | -     | -      | -    | -    |
| Critical Hdwy Stg 2      | 5.8    | -      | -     | -      | -    | -    |
| Follow-up Hdwy           | 3.5    | 3.3    | 2.2   | -      | -    | -    |
| Pot Cap-1 Maneuver       | 21     | 381    | 487   | -      | -    | -    |
| Stage 1                  | 193    | -      | -     | -      | -    | -    |
| Stage 2                  | 257    | -      | -     | -      | -    | -    |
| Platoon blocked, %       |        |        |       | -      | -    | -    |
| Mov Cap-1 Maneuver       | 17     | 381    | 487   | -      | -    | -    |
| Mov Cap-2 Maneuver       | 17     | -      | -     | -      | -    | -    |
| Stage 1                  | 193    | -      | -     | -      | -    | -    |
| Stage 2                  | 211    | -      | -     | -      | -    | -    |
| Approach                 | EB     | NB     |       | SB     |      |      |
| HCM Control Delay, s     | 21     | 0.6    |       | 0      |      |      |
| HCM LOS                  | C      |        |       |        |      |      |
| Minor Lane/Major Mvmt    | NBL    | NBT    | EBLn1 | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)         | 487    | -      | 17    | 381    | -    | -    |
| HCM Lane V/C Ratio       | 0.178  | -      | 0.083 | 0.174  | -    | -    |
| HCM Control Delay (s)    | 14     | -      | 235.1 | 16.4   | -    | -    |
| HCM Lane LOS             | B      | -      | F     | C      | -    | -    |
| HCM 95th %tile Q(veh)    | 0.6    | -      | 0.2   | 0.6    | -    | -    |

# Lanier Tract DRI

## 5: GA 53 & Lanier Valley Dr/Ahaluna Dr

existing p.m.

| Lane Group            | EBL   | EBT   | EBR | WBL   | WBT   | WBR | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
|-----------------------|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Total Split (s)       | 33.0  | 33.0  |     | 33.0  | 33.0  |     | 28.0  | 127.0 |     | 99.0  | 99.0  |     |
| Total Split (%)       | 20.6% | 20.6% |     | 20.6% | 20.6% |     | 17.5% | 79.4% |     | 61.9% | 61.9% |     |
| Maximum Green (s)     | 26.4  | 26.4  |     | 26.4  | 26.4  |     | 22.4  | 120.9 |     | 92.9  | 92.9  |     |
| Yellow Time (s)       | 4.0   | 4.0   |     | 4.0   | 4.0   |     | 3.0   | 4.5   |     | 4.5   | 4.5   |     |
| All-Red Time (s)      | 2.6   | 2.6   |     | 2.6   | 2.6   |     | 2.6   | 1.6   |     | 1.6   | 1.6   |     |
| Lost Time Adjust (s)  |       | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Lost Time (s)   |       | 6.6   |     |       | 6.6   |     | 5.6   | 6.1   |     | 6.1   | 6.1   |     |
| Lead/Lag              |       |       |     |       |       |     | Lead  |       |     | Lag   | Lag   |     |
| Lead-Lag Optimize?    |       |       |     |       |       |     | Yes   |       |     | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode           | None  | None  |     | None  | None  |     | None  | C-Max |     | C-Max | C-Max |     |
| Act Effect Green (s)  |       | 15.5  |     |       | 15.5  |     | 132.3 | 131.8 |     | 117.1 | 117.1 |     |
| Actuated g/C Ratio    |       | 0.10  |     |       | 0.10  |     | 0.83  | 0.82  |     | 0.73  | 0.73  |     |
| v/c Ratio             |       | 0.56  |     |       | 0.85  |     | 0.52  | 0.63  |     | 0.15  | 0.48  |     |
| Control Delay         |       | 26.1  |     |       | 97.4  |     | 9.9   | 8.5   |     | 11.5  | 10.4  |     |
| Queue Delay           |       | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay           |       | 26.1  |     |       | 97.4  |     | 9.9   | 8.5   |     | 11.5  | 10.4  |     |
| LOS                   |       | C     |     |       | F     |     | A     | A     |     | B     | B     |     |
| Approach Delay        |       | 26.1  |     |       | 97.4  |     |       | 8.6   |     |       | 10.4  |     |
| Approach LOS          |       | C     |     |       | F     |     |       | A     |     |       | B     |     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 129 (81%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 12.7

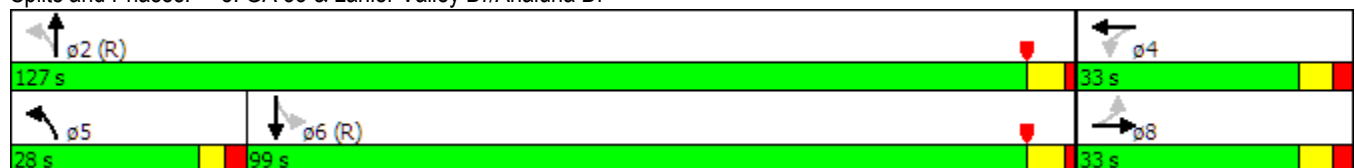
Intersection LOS: B

Intersection Capacity Utilization 79.8%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 5: GA 53 & Lanier Valley Dr/Ahaluna Dr



## Lanier Tract DRI

## 6: 53-Dawsonville Hwy &amp; Academy Sports

existing p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |  |  |  |  |  |  |  |
| Volume (vph)               | 13                                                                                | 3                                                                                 | 60                                                                                | 118                                                                               | 7                                                                                 | 42                                                                                | 87                                                                                  | 1763                                                                                | 138                                                                                 | 19                                                                                  | 1199                                                                                | 27                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 4%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 70                                                                                | 200                                                                                 |                                                                                     | 170                                                                                 | 190                                                                                 |                                                                                     | 360                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1805                                                                              | 1900                                                                              | 1615                                                                              | 1769                                                                              | 1862                                                                              | 1583                                                                              | 1796                                                                                | 3592                                                                                | 1607                                                                                | 1805                                                                                | 3574                                                                                | 1615                                                                                |
| Flt Permitted              | 0.752                                                                             |                                                                                   |                                                                                   | 0.756                                                                             |                                                                                   |                                                                                   | 0.177                                                                               |                                                                                     |                                                                                     | 0.083                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1429                                                                              | 1900                                                                              | 1615                                                                              | 1408                                                                              | 1862                                                                              | 1583                                                                              | 335                                                                                 | 3592                                                                                | 1607                                                                                | 158                                                                                 | 3574                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 63                                                                                |                                                                                   |                                                                                   | 63                                                                                |                                                                                     |                                                                                     | 69                                                                                  |                                                                                     |                                                                                     | 64                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 262                                                                               |                                                                                   |                                                                                   | 246                                                                               |                                                                                   |                                                                                     | 1836                                                                                |                                                                                     |                                                                                     | 685                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.1                                                                               |                                                                                   |                                                                                   | 6.7                                                                               |                                                                                   |                                                                                     | 27.8                                                                                |                                                                                     |                                                                                     | 10.4                                                                                |                                                                                     |
| Peak Hour Factor           | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.80                                                                              | 0.80                                                                              | 0.80                                                                              | 0.98                                                                                | 0.98                                                                                | 0.98                                                                                | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 14                                                                                | 3                                                                                 | 63                                                                                | 148                                                                               | 9                                                                                 | 52                                                                                | 89                                                                                  | 1799                                                                                | 141                                                                                 | 20                                                                                  | 1236                                                                                | 28                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 14                                                                                | 3                                                                                 | 63                                                                                | 148                                                                               | 9                                                                                 | 52                                                                                | 89                                                                                  | 1799                                                                                | 141                                                                                 | 20                                                                                  | 1236                                                                                | 28                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 2                                                                                   |                                                                                     | 2                                                                                   | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 42.0                                                                              | 42.0                                                                              | 42.0                                                                              | 42.4                                                                              | 42.4                                                                              | 42.4                                                                              | 11.4                                                                                | 30.3                                                                                | 30.3                                                                                | 11.0                                                                                | 29.3                                                                                | 29.3                                                                                |

# Lanier Tract DRI

## 6: 53-Dawsonville Hwy & Academy Sports

existing p.m.

|                         |  |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 43.0                                                                               | 43.0  | 43.0  | 43.0  | 43.0  | 43.0  | 13.6  | 106.0 | 106.0 | 11.0  | 103.4 | 103.4 |
| Total Split (%)         | 26.9%                                                                              | 26.9% | 26.9% | 26.9% | 26.9% | 26.9% | 8.5%  | 66.3% | 66.3% | 6.9%  | 64.6% | 64.6% |
| Maximum Green (s)       | 36.6                                                                               | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  | 7.2   | 99.8  | 99.8  | 5.0   | 97.2  | 97.2  |
| Yellow Time (s)         | 3.4                                                                                | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 4.3   | 4.3   | 3.0   | 4.3   | 4.3   |
| All-Red Time (s)        | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 1.9   | 1.9   | 3.0   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.4                                                                                | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.2   | 6.2   | 6.0   | 6.2   | 6.2   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           | 4.0                                                                                | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 23.0                                                                               | 23.0  | 23.0  | 32.0  | 32.0  | 32.0  |       | 20.0  | 20.0  |       | 19.0  | 19.0  |
| Pedestrian Calls (#/hr) | 0                                                                                  | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    | 22.1                                                                               | 22.1  | 22.1  | 22.1  | 22.1  | 22.1  | 122.7 | 118.0 | 118.0 | 117.5 | 111.4 | 111.4 |
| Actuated g/C Ratio      | 0.14                                                                               | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.77  | 0.74  | 0.74  | 0.73  | 0.70  | 0.70  |
| v/c Ratio               | 0.07                                                                               | 0.01  | 0.23  | 0.76  | 0.04  | 0.19  | 0.27  | 0.68  | 0.12  | 0.11  | 0.50  | 0.02  |
| Control Delay           | 57.2                                                                               | 55.0  | 13.8  | 89.5  | 56.0  | 9.9   | 7.8   | 13.6  | 6.8   | 5.5   | 8.9   | 0.0   |
| Queue Delay             | 0.0                                                                                | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.1   | 0.0   |
| Total Delay             | 57.2                                                                               | 55.0  | 13.8  | 89.5  | 56.0  | 9.9   | 7.8   | 13.6  | 6.8   | 5.5   | 9.0   | 0.0   |
| LOS                     | E                                                                                  | D     | B     | F     | E     | A     | A     | B     | A     | A     | A     | A     |
| Approach Delay          |                                                                                    | 22.9  |       |       | 68.3  |       |       | 12.9  |       |       | 8.7   |       |
| Approach LOS            |                                                                                    | C     |       |       | E     |       |       | B     |       |       | A     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 120 (75%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 115

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.76

Intersection Signal Delay: 14.8

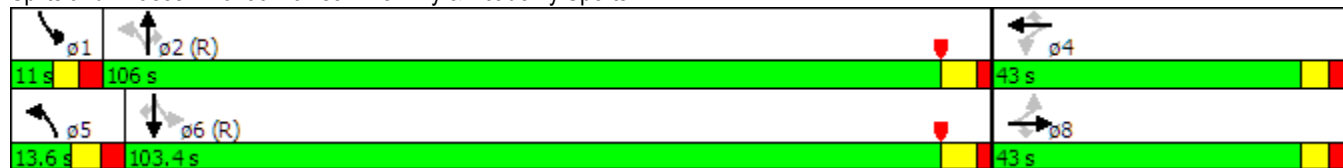
Intersection LOS: B

Intersection Capacity Utilization 81.6%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 6: 53-Dawsonville Hwy & Academy Sports



# Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 & McEver Road/McEver

existing p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |                                                                                   |   |  |  |  |  |  |
| Volume (vph)               | 845                                                                               | 213                                                                               | 386                                                                               | 87                                                                                | 91                                                                                | 81                                                                                | 433                                                                                 | 1362                                                                                | 46                                                                                  | 62                                                                                  | 1029                                                                                | 481                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 1%                                                                                |                                                                                   |                                                                                   | 5%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 180                                                                               |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 310                                                                                 |                                                                                     | 185                                                                                 | 255                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 50                                                                                |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.951                                                                             | 0.850                                                                             |                                                                                   | 0.929                                                                             |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 3484                                                                              | 1708                                                                              | 1527                                                                              | 1760                                                                              | 1721                                                                              | 0                                                                                 | 3484                                                                                | 3592                                                                                | 1607                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   | 0.550                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 3484                                                                              | 1708                                                                              | 1527                                                                              | 1019                                                                              | 1721                                                                              | 0                                                                                 | 3484                                                                                | 3592                                                                                | 1607                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 19                                                                                | 296                                                                               |                                                                                   | 27                                                                                |                                                                                   |                                                                                     |                                                                                     | 172                                                                                 |                                                                                     |                                                                                     | 307                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 580                                                                               |                                                                                   |                                                                                   | 331                                                                               |                                                                                   |                                                                                     | 921                                                                                 |                                                                                     |                                                                                     | 1504                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 8.8                                                                               |                                                                                   |                                                                                   | 9.0                                                                               |                                                                                   |                                                                                     | 14.0                                                                                |                                                                                     |                                                                                     | 22.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.86                                                                              | 0.86                                                                              | 0.86                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 889                                                                               | 224                                                                               | 406                                                                               | 101                                                                               | 106                                                                               | 94                                                                                | 446                                                                                 | 1404                                                                                | 47                                                                                  | 68                                                                                  | 1131                                                                                | 529                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   | 27%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 889                                                                               | 334                                                                               | 296                                                                               | 101                                                                               | 200                                                                               | 0                                                                                 | 446                                                                                 | 1404                                                                                | 47                                                                                  | 68                                                                                  | 1131                                                                                | 529                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 24                                                                                |                                                                                   |                                                                                   | 24                                                                                |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                             | NA                                                                                |                                                                                   | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 8                                                                                 |                                                                                   | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 8                                                                                 | 8                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 13.2                                                                              | 50.2                                                                              | 50.2                                                                              | 11.6                                                                              | 48.2                                                                              |                                                                                   | 13.4                                                                                | 35.6                                                                                | 35.6                                                                                | 12.9                                                                                | 44.6                                                                                | 44.6                                                                                |

Lanier Tract DRI

8: Dawsonville Highway/GA 53 & McEver Road/McEver

existing p.m.

|                         |  |       |       |      |       |     |       |       |       |      |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|------|-------|-----|-------|-------|-------|------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL  | WBT   | WBR | NBL   | NBT   | NBR   | SBL  | SBT   | SBR   |
| Total Split (s)         | 37.0                                                                               | 72.1  | 72.1  | 13.1 | 48.2  |     | 23.0  | 61.8  | 61.8  | 13.0 | 51.8  | 51.8  |
| Total Split (%)         | 23.1%                                                                              | 45.1% | 45.1% | 8.2% | 30.1% |     | 14.4% | 38.6% | 38.6% | 8.1% | 32.4% | 32.4% |
| Maximum Green (s)       | 29.7                                                                               | 64.8  | 64.8  | 6.6  | 40.9  |     | 15.5  | 55.2  | 55.2  | 5.8  | 45.2  | 45.2  |
| Yellow Time (s)         | 4.3                                                                                | 4.3   | 4.3   | 3.5  | 4.3   |     | 4.5   | 4.4   | 4.4   | 4.2  | 4.4   | 4.4   |
| All-Red Time (s)        | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 2.2   | 2.2   | 3.0  | 2.2   | 2.2   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Lost Time (s)     | 7.3                                                                                | 7.3   | 7.3   | 6.5  | 7.3   |     | 7.5   | 6.6   | 6.6   | 7.2  | 6.6   | 6.6   |
| Lead/Lag                | Lead                                                                               | Lag   | Lag   | Lead | Lag   |     | Lag   | Lag   | Lag   | Lead | Lead  | Lead  |
| Lead-Lag Optimize?      | Yes                                                                                | Yes   | Yes   | Yes  | Yes   |     | Yes   | Yes   | Yes   | Yes  | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None | None  |     | None  | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s)           |                                                                                    | 4.0   | 4.0   |      | 4.0   |     |       | 4.0   | 4.0   |      | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    | 38.0  | 38.0  |      | 36.0  |     |       | 25.0  | 25.0  |      | 34.0  | 34.0  |
| Pedestrian Calls (#/hr) |                                                                                    | 0     | 0     |      | 0     |     |       | 0     | 0     |      | 0     | 0     |
| Act Effect Green (s)    | 29.7                                                                               | 45.6  | 45.6  | 29.1 | 21.7  |     | 15.5  | 66.4  | 66.4  | 13.8 | 64.4  | 64.4  |
| Actuated g/C Ratio      | 0.19                                                                               | 0.28  | 0.28  | 0.18 | 0.14  |     | 0.10  | 0.42  | 0.42  | 0.09 | 0.40  | 0.40  |
| v/c Ratio               | 1.38                                                                               | 0.67  | 0.46  | 0.47 | 0.78  |     | 1.32  | 0.94  | 0.06  | 0.44 | 0.78  | 0.63  |
| Control Delay           | 225.2                                                                              | 53.9  | 6.2   | 45.5 | 77.5  |     | 221.7 | 71.5  | 0.1   | 73.5 | 62.2  | 34.7  |
| Queue Delay             | 0.0                                                                                | 0.4   | 0.1   | 1.2  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Delay             | 225.2                                                                              | 54.3  | 6.4   | 46.7 | 77.5  |     | 221.7 | 71.5  | 0.1   | 73.5 | 62.2  | 34.7  |
| LOS                     | F                                                                                  | D     | A     | D    | E     |     | F     | E     | A     | E    | E     | C     |
| Approach Delay          |                                                                                    | 145.0 |       |      | 67.2  |     |       | 105.0 |       |      | 54.2  |       |
| Approach LOS            |                                                                                    | F     |       |      | E     |     |       | F     |       |      | D     |       |

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 52 (33%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.38

Intersection Signal Delay: 98.0

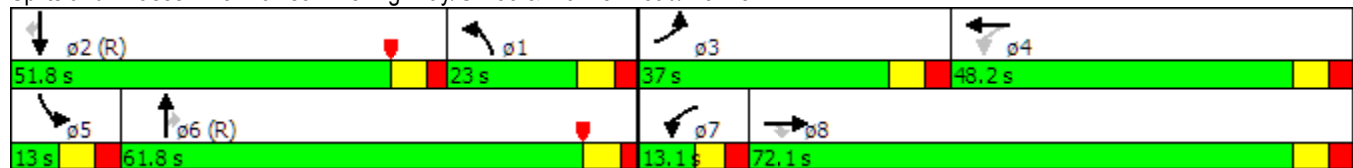
Intersection LOS: F

Intersection Capacity Utilization 99.3%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 8: Dawsonville Highway/GA 53 & McEver Road/McEver



## Lanier Tract DRI

## 9: Dawsonville Highway &amp; Greenhill Circle/Greenhill Circle

existing p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 132                                                                               | 9                                                                                 | 138                                                                               | 60                                                                                | 20                                                                                | 38                                                                                | 248                                                                                 | 1749                                                                                | 70                                                                                  | 40                                                                                  | 1392                                                                                | 53                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 3%                                                                                |                                                                                   |                                                                                   | 7%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 190                                                                                 |                                                                                     | 190                                                                                 | 185                                                                                 |                                                                                     | 100                                                                                 |
| Storage Lanes              | 0                                                                                 |                                                                                   | 1                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              |                                                                                   | 0.955                                                                             |                                                                                   |                                                                                   | 0.964                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1787                                                                              | 1591                                                                              | 0                                                                                 | 1767                                                                              | 1558                                                                              | 1796                                                                                | 3592                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   | 0.608                                                                             |                                                                                   |                                                                                   | 0.504                                                                             |                                                                                   | 0.091                                                                               |                                                                                     |                                                                                     | 0.088                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1138                                                                              | 1591                                                                              | 0                                                                                 | 924                                                                               | 1558                                                                              | 172                                                                                 | 3592                                                                                | 1607                                                                                | 167                                                                                 | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 152                                                                               |                                                                                   |                                                                                   | 95                                                                                |                                                                                     |                                                                                     | 54                                                                                  |                                                                                     |                                                                                     | 95                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 288                                                                               |                                                                                   |                                                                                   | 254                                                                               |                                                                                   |                                                                                     | 778                                                                                 |                                                                                     |                                                                                     | 921                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.9                                                                               |                                                                                   |                                                                                   | 6.9                                                                               |                                                                                   |                                                                                     | 11.8                                                                                |                                                                                     |                                                                                     | 14.0                                                                                |                                                                                     |
| Peak Hour Factor           | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.78                                                                              | 0.78                                                                              | 0.78                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 145                                                                               | 10                                                                                | 152                                                                               | 77                                                                                | 26                                                                                | 49                                                                                | 256                                                                                 | 1803                                                                                | 72                                                                                  | 42                                                                                  | 1465                                                                                | 56                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 155                                                                               | 152                                                                               | 0                                                                                 | 103                                                                               | 49                                                                                | 256                                                                                 | 1803                                                                                | 72                                                                                  | 42                                                                                  | 1465                                                                                | 56                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.02                                                                              | 1.02                                                                              | 1.02                                                                              | 1.05                                                                              | 1.05                                                                              | 1.05                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              | 23.0                                                                              | 39.9                                                                              | 39.9                                                                              | 39.9                                                                              | 11.0                                                                                | 28.0                                                                                | 28.0                                                                                | 10.0                                                                                | 36.0                                                                                | 36.0                                                                                |

# Lanier Tract DRI

## 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle

existing p.m.

| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Total Split (s)         | 40.0  | 40.0  | 40.0  | 40.0  | 40.0  | 40.0  | 35.0  | 109.0 | 109.0 | 11.0  | 85.0  | 85.0  |
| Total Split (%)         | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 21.9% | 68.1% | 68.1% | 6.9%  | 53.1% | 53.1% |
| Maximum Green (s)       | 34.1  | 34.1  | 34.1  | 34.1  | 34.1  | 34.1  | 29.0  | 103.0 | 103.0 | 6.0   | 79.0  | 79.0  |
| Yellow Time (s)         | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 4.4   | 4.4   | 3.5   | 4.4   | 4.4   |
| All-Red Time (s)        | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 3.0   | 1.6   | 1.6   | 1.5   | 1.6   | 1.6   |
| Lost Time Adjust (s)    |       | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |       | 5.9   | 5.9   |       | 5.9   | 5.9   | 6.0   | 6.0   | 6.0   | 5.0   | 6.0   | 6.0   |
| Lead/Lag                |       |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None  | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           |       |       |       | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     |       |       |       | 30.0  | 30.0  | 30.0  |       | 18.0  | 18.0  |       | 26.0  | 26.0  |
| Pedestrian Calls (#/hr) |       |       |       | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    |       | 25.7  | 25.7  |       | 25.7  | 25.7  | 122.4 | 113.4 | 113.4 | 101.3 | 94.2  | 94.2  |
| Actuated g/C Ratio      |       | 0.16  | 0.16  |       | 0.16  | 0.16  | 0.76  | 0.71  | 0.71  | 0.63  | 0.59  | 0.59  |
| v/c Ratio               |       | 0.85  | 0.40  |       | 0.70  | 0.15  | 0.72  | 0.71  | 0.06  | 0.25  | 0.69  | 0.06  |
| Control Delay           |       | 100.8 | 10.4  |       | 86.0  | 0.9   | 25.8  | 25.6  | 6.1   | 16.4  | 50.1  | 11.5  |
| Queue Delay             |       | 0.0   | 0.4   |       | 3.9   | 0.0   | 0.0   | 7.9   | 0.0   | 0.0   | 0.4   | 0.0   |
| Total Delay             |       | 100.8 | 10.8  |       | 90.0  | 0.9   | 25.8  | 33.5  | 6.1   | 16.4  | 50.4  | 11.5  |
| LOS                     |       | F     | B     |       | F     | A     | C     | C     | A     | B     | D     | B     |
| Approach Delay          |       | 56.2  |       |       | 61.3  |       |       | 31.6  |       |       | 48.1  |       |
| Approach LOS            |       | E     |       |       | E     |       |       | C     |       |       | D     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 40.7

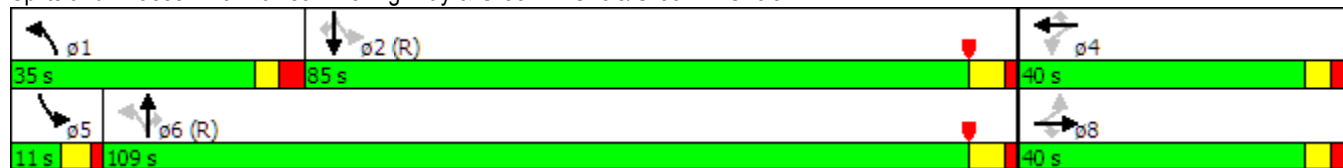
Intersection LOS: D

Intersection Capacity Utilization 81.6%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle





## Lanier Tract DRI

## 10: Dawsonville Highway &amp; Shallowford Rd/Best Buy

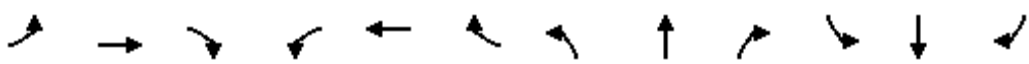
existing p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |                                                                                   |  |  |   |  |  |  |  |  |
| Volume (vph)               | 518                                                                               | 38                                                                                | 26                                                                                | 36                                                                                | 27                                                                                | 7                                                                                 | 40                                                                                  | 1639                                                                                | 114                                                                                 | 7                                                                                   | 1161                                                                                | 463                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | -1%                                                                               |                                                                                   |                                                                                   | 10%                                                                               |                                                                                   |                                                                                     | -4%                                                                                 |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 350                                                                               |                                                                                   | 350                                                                               | 0                                                                                 |                                                                                   | 0                                                                                 | 350                                                                                 |                                                                                     | 150                                                                                 | 265                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 100                                                                               |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             | 0.959                                                                             |                                                                                   |                                                                                   | 0.972                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1723                                                                              | 1740                                                                              | 1623                                                                              | 0                                                                                 | 1754                                                                              | 1534                                                                              | 1841                                                                                | 3682                                                                                | 1647                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             | 0.959                                                                             |                                                                                   |                                                                                   | 0.972                                                                             |                                                                                   | 0.113                                                                               |                                                                                     |                                                                                     | 0.060                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1723                                                                              | 1740                                                                              | 1623                                                                              | 0                                                                                 | 1754                                                                              | 1534                                                                              | 219                                                                                 | 3682                                                                                | 1647                                                                                | 115                                                                                 | 3628                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 106                                                                               |                                                                                   |                                                                                   | 111                                                                               |                                                                                     |                                                                                     | 65                                                                                  |                                                                                     |                                                                                     | 321                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 653                                                                               |                                                                                   |                                                                                   | 178                                                                               |                                                                                   |                                                                                     | 1046                                                                                |                                                                                     |                                                                                     | 778                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 9.9                                                                               |                                                                                   |                                                                                   | 4.9                                                                               |                                                                                   |                                                                                     | 15.8                                                                                |                                                                                     |                                                                                     | 11.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.94                                                                                | 0.94                                                                                | 0.94                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 576                                                                               | 42                                                                                | 29                                                                                | 41                                                                                | 31                                                                                | 8                                                                                 | 43                                                                                  | 1744                                                                                | 121                                                                                 | 8                                                                                   | 1276                                                                                | 509                                                                                 |
| Shared Lane Traffic (%)    | 47%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 305                                                                               | 313                                                                               | 29                                                                                | 0                                                                                 | 72                                                                                | 8                                                                                 | 43                                                                                  | 1744                                                                                | 121                                                                                 | 8                                                                                   | 1276                                                                                | 509                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 0.99                                                                              | 0.99                                                                              | 0.99                                                                              | 1.07                                                                              | 1.07                                                                              | 1.07                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Split                                                                             | NA                                                                                | Perm                                                                              | Split                                                                             | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | Perm                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 3                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 3                                                                                 | 3                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 36.7                                                                              | 36.7                                                                              | 36.7                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                                | 28.8                                                                                | 28.8                                                                                | 30.8                                                                                | 30.8                                                                                | 30.8                                                                                |

# Lanier Tract DRI

## 10: Dawsonville Highway & Shallowford Rd/Best Buy

existing p.m.

|                         |  |       |       |       |       |       |      |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL  | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 37.0                                                                               | 37.0  | 37.0  | 38.9  | 38.9  | 38.9  | 10.8 | 84.1  | 84.1  | 73.3  | 73.3  | 73.3  |
| Total Split (%)         | 23.1%                                                                              | 23.1% | 23.1% | 24.3% | 24.3% | 24.3% | 6.8% | 52.6% | 52.6% | 45.8% | 45.8% | 45.8% |
| Maximum Green (s)       | 30.3                                                                               | 30.3  | 30.3  | 33.0  | 33.0  | 33.0  | 5.0  | 77.3  | 77.3  | 66.5  | 66.5  | 66.5  |
| Yellow Time (s)         | 4.5                                                                                | 4.5   | 4.5   | 3.0   | 3.0   | 3.0   | 3.0  | 4.9   | 4.9   | 4.9   | 4.9   | 4.9   |
| All-Red Time (s)        | 2.2                                                                                | 2.2   | 2.2   | 2.9   | 2.9   | 2.9   | 2.8  | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.7                                                                                | 6.7   | 6.7   |       | 5.9   | 5.9   | 5.8  | 6.8   | 6.8   | 6.8   | 6.8   | 6.8   |
| Lead/Lag                | Lead                                                                               | Lead  | Lead  | Lag   | Lag   | Lag   | Lead |       |       | Lag   | Lag   | Lag   |
| Lead-Lag Optimize?      | Yes                                                                                | Yes   | Yes   | Yes   | Yes   | Yes   | Yes  |       |       | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None | C-Min | C-Min | C-Min | C-Min | C-Min |
| Walk Time (s)           | 4.0                                                                                | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 26.0                                                                               | 26.0  | 26.0  | 29.0  | 29.0  | 29.0  |      | 18.0  | 18.0  | 20.0  | 20.0  | 20.0  |
| Pedestrian Calls (#/hr) | 0                                                                                  | 0     | 0     | 0     | 0     | 0     |      | 0     | 0     | 0     | 0     | 0     |
| Act Effect Green (s)    | 32.0                                                                               | 32.0  | 32.0  |       | 11.9  | 11.9  | 97.7 | 96.7  | 96.7  | 86.2  | 86.2  | 86.2  |
| Actuated g/C Ratio      | 0.20                                                                               | 0.20  | 0.20  |       | 0.07  | 0.07  | 0.61 | 0.60  | 0.60  | 0.54  | 0.54  | 0.54  |
| v/c Ratio               | 0.88                                                                               | 0.90  | 0.07  |       | 0.55  | 0.04  | 0.21 | 0.78  | 0.12  | 0.13  | 0.65  | 0.50  |
| Control Delay           | 88.1                                                                               | 90.1  | 0.3   |       | 86.7  | 0.3   | 15.7 | 27.6  | 7.1   | 51.9  | 55.6  | 32.8  |
| Queue Delay             | 1.0                                                                                | 1.2   | 0.0   |       | 0.0   | 0.0   | 0.0  | 7.4   | 0.0   | 0.0   | 2.0   | 0.4   |
| Total Delay             | 89.1                                                                               | 91.3  | 0.3   |       | 86.7  | 0.3   | 15.7 | 34.9  | 7.1   | 51.9  | 57.6  | 33.2  |
| LOS                     | F                                                                                  | F     | A     |       | F     | A     | B    | C     | A     | D     | E     | C     |
| Approach Delay          |                                                                                    | 86.2  |       |       | 78.0  |       |      | 32.7  |       |       | 50.7  |       |
| Approach LOS            |                                                                                    | F     |       |       | E     |       |      | C     |       |       | D     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 91 (57%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 48.6

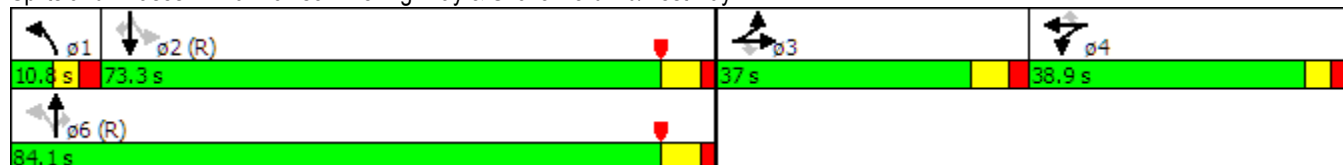
Intersection LOS: D

Intersection Capacity Utilization 81.0%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 10: Dawsonville Highway & Shallowford Rd/Best Buy



## Appendix D

### No-Build Intersection Analysis

Lanier Tract DRI  
1: Sportsman Club Road & Strickland Drive

no build a.m.

Intersection

Int Delay, s/veh 2.6

| Movement                 | WBL  | WBR  | NBT  | NBR  | SBL  | SBT  |
|--------------------------|------|------|------|------|------|------|
| Vol, veh/h               | 11   | 0    | 7    | 1    | 0    | 25   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | 0    | -    | -    | 0    |
| Grade, %                 | 0    | -    | 0    | -    | -    | 0    |
| Peak Hour Factor         | 50   | 50   | 58   | 58   | 64   | 64   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 22   | 0    | 12   | 2    | 0    | 39   |

| Major/Minor          | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 52     | 13     | 0      |
| Stage 1              | 13     | -      | -      |
| Stage 2              | 39     | -      | -      |
| Critical Hdwy        | 6.42   | 6.22   | 4.12   |
| Critical Hdwy Stg 1  | 5.42   | -      | -      |
| Critical Hdwy Stg 2  | 5.42   | -      | -      |
| Follow-up Hdwy       | 3.518  | 3.318  | 2.218  |
| Pot Cap-1 Maneuver   | 957    | 1067   | 1604   |
| Stage 1              | 1010   | -      | -      |
| Stage 2              | 983    | -      | -      |
| Platoon blocked, %   | -      | -      | -      |
| Mov Cap-1 Maneuver   | 957    | 1067   | 1604   |
| Mov Cap-2 Maneuver   | 957    | -      | -      |
| Stage 1              | 1010   | -      | -      |
| Stage 2              | 983    | -      | -      |

| Approach             | WB  | NB | SB |
|----------------------|-----|----|----|
| HCM Control Delay, s | 8.9 | 0  | 0  |
| HCM LOS              | A   |    |    |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL  | SBT |
|-----------------------|-----|----------|------|-----|
| Capacity (veh/h)      | -   | - 957    | 1604 | -   |
| HCM Lane V/C Ratio    | -   | - 0.023  | -    | -   |
| HCM Control Delay (s) | -   | - 8.9    | 0    | -   |
| HCM Lane LOS          | -   | - A      | A    | -   |
| HCM 95th %tile Q(veh) | -   | - 0.1    | 0    | -   |

Lanier Tract DRI  
2: GA 53 & Sportsman Club Road

no build a.m.

| Intersection               |        |                        |      |                            |      |      |                                |          |      |          |      |      |
|----------------------------|--------|------------------------|------|----------------------------|------|------|--------------------------------|----------|------|----------|------|------|
| Int Delay, s/veh           |        | 11.8                   |      |                            |      |      |                                |          |      |          |      |      |
|                            |        |                        |      |                            |      |      |                                |          |      |          |      |      |
| Movement                   | EBL    | EBT                    | EBR  | WBL                        | WBT  | WBR  | NBL                            | NBT      | NBR  | SBL      | SBT  | SBR  |
| Vol, veh/h                 | 10     | 1863                   | 0    | 0                          | 820  | 9    | 0                              | 0        | 0    | 28       | 0    | 17   |
| Conflicting Peds, #/hr     | 0      | 0                      | 0    | 0                          | 0    | 0    | 0                              | 0        | 0    | 0        | 0    | 0    |
| Sign Control               | Free   | Free                   | Free | Free                       | Free | Free | Stop                           | Stop     | Stop | Stop     | Stop | Stop |
| RT Channelized             | -      | -                      | None | -                          | -    | None | -                              | -        | None | -        | -    | None |
| Storage Length             | 0      | -                      | -    | 0                          | -    | -    | -                              | -        | -    | -        | -    | -    |
| Veh in Median Storage, #   | -      | 0                      | -    | -                          | 0    | -    | -                              | 0        | -    | -        | 0    | -    |
| Grade, %                   | -      | 0                      | -    | -                          | 0    | -    | -                              | 0        | -    | -        | 0    | -    |
| Peak Hour Factor           | 86     | 86                     | 86   | 84                         | 84   | 84   | 92                             | 92       | 92   | 59       | 59   | 59   |
| Heavy Vehicles, %          | 2      | 2                      | 2    | 2                          | 2    | 2    | 2                              | 2        | 2    | 2        | 2    | 2    |
| Mvmt Flow                  | 12     | 2166                   | 0    | 0                          | 976  | 11   | 0                              | 0        | 0    | 47       | 0    | 29   |
|                            |        |                        |      |                            |      |      |                                |          |      |          |      |      |
| Major/Minor                | Major1 |                        |      | Major2                     |      |      | Minor1                         |          |      | Minor2   |      |      |
| Conflicting Flow All       | 987    | 0                      | 0    | 2166                       | 0    | 0    | 2678                           | 3177     | 1083 | 2088     | 3172 | 493  |
| Stage 1                    | -      | -                      | -    | -                          | -    | -    | 2190                           | 2190     | -    | 982      | 982  | -    |
| Stage 2                    | -      | -                      | -    | -                          | -    | -    | 488                            | 987      | -    | 1106     | 2190 | -    |
| Critical Hdwy              | 4.14   | -                      | -    | 4.14                       | -    | -    | 7.54                           | 6.54     | 6.94 | 7.54     | 6.54 | 6.94 |
| Critical Hdwy Stg 1        | -      | -                      | -    | -                          | -    | -    | 6.54                           | 5.54     | -    | 6.54     | 5.54 | -    |
| Critical Hdwy Stg 2        | -      | -                      | -    | -                          | -    | -    | 6.54                           | 5.54     | -    | 6.54     | 5.54 | -    |
| Follow-up Hdwy             | 2.22   | -                      | -    | 2.22                       | -    | -    | 3.52                           | 4.02     | 3.32 | 3.52     | 4.02 | 3.32 |
| Pot Cap-1 Maneuver         | 696    | -                      | -    | 243                        | -    | -    | 11                             | 10       | 213  | ~ 30     | 10   | 522  |
| Stage 1                    | -      | -                      | -    | -                          | -    | -    | 46                             | 82       | -    | 267      | 325  | -    |
| Stage 2                    | -      | -                      | -    | -                          | -    | -    | 530                            | 324      | -    | 224      | 82   | -    |
| Platoon blocked, %         |        | -                      | -    |                            | -    | -    |                                |          |      |          |      |      |
| Mov Cap-1 Maneuver         | 696    | -                      | -    | 243                        | -    | -    | 10                             | 10       | 213  | ~ 30     | 10   | 522  |
| Mov Cap-2 Maneuver         | -      | -                      | -    | -                          | -    | -    | 10                             | 10       | -    | ~ 30     | 10   | -    |
| Stage 1                    | -      | -                      | -    | -                          | -    | -    | 45                             | 81       | -    | 262      | 325  | -    |
| Stage 2                    | -      | -                      | -    | -                          | -    | -    | 501                            | 324      | -    | 220      | 81   | -    |
|                            |        |                        |      |                            |      |      |                                |          |      |          |      |      |
| Approach                   | EB     |                        |      | WB                         |      |      | NB                             |          |      | SB       |      |      |
| HCM Control Delay, s       | 0.1    |                        |      | 0                          |      |      | 0                              |          |      | \$ 496.6 |      |      |
| HCM LOS                    |        |                        |      |                            |      |      | A                              |          |      | F        |      |      |
|                            |        |                        |      |                            |      |      |                                |          |      |          |      |      |
| Minor Lane/Major Mvmt      | NBLn1  | EBL                    | EBT  | EBR                        | WBL  | WBT  | WBR                            | SBLn1    |      |          |      |      |
| Capacity (veh/h)           | -      | 696                    | -    | -                          | 243  | -    | -                              | 47       |      |          |      |      |
| HCM Lane V/C Ratio         | -      | 0.017                  | -    | -                          | -    | -    | -                              | 1.623    |      |          |      |      |
| HCM Control Delay (s)      | 0      | 10.3                   | -    | -                          | 0    | -    | -                              | \$ 496.6 |      |          |      |      |
| HCM Lane LOS               | A      | B                      | -    | -                          | A    | -    | -                              | F        |      |          |      |      |
| HCM 95th %tile Q(veh)      | -      | 0.1                    | -    | -                          | 0    | -    | -                              | 7.5      |      |          |      |      |
| Notes                      |        |                        |      |                            |      |      |                                |          |      |          |      |      |
| ~: Volume exceeds capacity |        | \$: Delay exceeds 300s |      | +: Computation Not Defined |      |      | *: All major volume in platoon |          |      |          |      |      |

Lanier Tract DRI  
3: GA 53 & Avonlea Way

no build a.m.

Intersection

Int Delay, s/veh 4.5

| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
|--------------------------|------|------|------|------|------|------|
| Vol, veh/h               | 17   | 79   | 13   | 836  | 1842 | 7    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | 0    | 0    | -    | -    | 0    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 84   | 84   | 88   | 88   | 86   | 86   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 20   | 94   | 15   | 950  | 2142 | 8    |

| Major/Minor          | Minor2 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 2647   | 1071   | 2142 0 |
| Stage 1              | 2142   | -      | - -    |
| Stage 2              | 505    | -      | - -    |
| Critical Hdwy        | 6.84   | 6.94   | 4.14 - |
| Critical Hdwy Stg 1  | 5.84   | -      | - -    |
| Critical Hdwy Stg 2  | 5.84   | -      | - -    |
| Follow-up Hdwy       | 3.52   | 3.32   | 2.22 - |
| Pot Cap-1 Maneuver   | ~ 19   | 217    | 249 -  |
| Stage 1              | 76     | -      | - -    |
| Stage 2              | 571    | -      | - -    |
| Platoon blocked, %   |        |        | - -    |
| Mov Cap-1 Maneuver   | ~ 18   | 217    | 249 -  |
| Mov Cap-2 Maneuver   | ~ 18   | -      | - -    |
| Stage 1              | 76     | -      | - -    |
| Stage 2              | 537    | -      | - -    |

| Approach             | EB    | NB  | SB |
|----------------------|-------|-----|----|
| HCM Control Delay, s | 125.5 | 0.3 | 0  |
| HCM LOS              | F     |     |    |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | EBLn2 | SBT | SBR |
|-----------------------|-------|-----|-------|-------|-----|-----|
| Capacity (veh/h)      | 249   | -   | 18    | 217   | -   | -   |
| HCM Lane V/C Ratio    | 0.059 | -   | 1.124 | 0.433 | -   | -   |
| HCM Control Delay (s) | 20.4  | \$  | 552.3 | 33.7  | -   | -   |
| HCM Lane LOS          | C     | -   | F     | D     | -   | -   |
| HCM 95th %tile Q(veh) | 0.2   | -   | 2.9   | 2     | -   | -   |

Notes

~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Lanier Tract DRI  
4: GA 53 & Canterbury Road

no build a.m.

| Intersection                                                                                                         |        |        |       |        |      |      |
|----------------------------------------------------------------------------------------------------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh                                                                                                     | 6.7    |        |       |        |      |      |
| Movement                                                                                                             | EBL    | EBR    | NBL   | NBT    | SBT  | SBR  |
| Vol, veh/h                                                                                                           | 20     | 105    | 25    | 797    | 1969 | 8    |
| Conflicting Peds, #/hr                                                                                               | 0      | 0      | 0     | 0      | 0    | 0    |
| Sign Control                                                                                                         | Stop   | Stop   | Free  | Free   | Free | Free |
| RT Channelized                                                                                                       | -      | None   | -     | None   | -    | None |
| Storage Length                                                                                                       | 0      | 0      | 0     | -      | -    | 0    |
| Veh in Median Storage, #                                                                                             | 0      | -      | -     | 0      | 0    | -    |
| Grade, %                                                                                                             | 0      | -      | -     | 0      | 0    | -    |
| Peak Hour Factor                                                                                                     | 88     | 88     | 86    | 86     | 91   | 91   |
| Heavy Vehicles, %                                                                                                    | 2      | 2      | 2     | 2      | 2    | 2    |
| Mvmt Flow                                                                                                            | 23     | 119    | 29    | 927    | 2164 | 9    |
| Major/Minor                                                                                                          | Minor2 | Major1 |       | Major2 |      |      |
| Conflicting Flow All                                                                                                 | 2686   | 1082   | 2164  | 0      | -    | 0    |
| Stage 1                                                                                                              | 2164   | -      | -     | -      | -    | -    |
| Stage 2                                                                                                              | 522    | -      | -     | -      | -    | -    |
| Critical Hdwy                                                                                                        | 6.84   | 6.94   | 4.14  | -      | -    | -    |
| Critical Hdwy Stg 1                                                                                                  | 5.84   | -      | -     | -      | -    | -    |
| Critical Hdwy Stg 2                                                                                                  | 5.84   | -      | -     | -      | -    | -    |
| Follow-up Hdwy                                                                                                       | 3.52   | 3.32   | 2.22  | -      | -    | -    |
| Pot Cap-1 Maneuver                                                                                                   | ~ 18   | 213    | 244   | -      | -    | -    |
| Stage 1                                                                                                              | 74     | -      | -     | -      | -    | -    |
| Stage 2                                                                                                              | 560    | -      | -     | -      | -    | -    |
| Platoon blocked, %                                                                                                   |        |        |       | -      | -    | -    |
| Mov Cap-1 Maneuver                                                                                                   | ~ 16   | 213    | 244   | -      | -    | -    |
| Mov Cap-2 Maneuver                                                                                                   | ~ 16   | -      | -     | -      | -    | -    |
| Stage 1                                                                                                              | 74     | -      | -     | -      | -    | -    |
| Stage 2                                                                                                              | 493    | -      | -     | -      | -    | -    |
| Approach                                                                                                             | EB     | NB     |       | SB     |      |      |
| HCM Control Delay, s                                                                                                 | 149.3  | 0.7    |       | 0      |      |      |
| HCM LOS                                                                                                              | F      |        |       |        |      |      |
| Minor Lane/Major Mvmt                                                                                                | NBL    | NBT    | EBLn1 | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)                                                                                                     | 244    | -      | 16    | 213    | -    | -    |
| HCM Lane V/C Ratio                                                                                                   | 0.119  | -      | 1.42  | 0.56   | -    | -    |
| HCM Control Delay (s)                                                                                                | 21.7   | -      | 715.5 | 41.5   | -    | -    |
| HCM Lane LOS                                                                                                         | C      | -      | F     | E      | -    | -    |
| HCM 95th %tile Q(veh)                                                                                                | 0.4    | -      | 3.4   | 3      | -    | -    |
| Notes                                                                                                                |        |        |       |        |      |      |
| ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |        |        |       |        |      |      |

Lanier Tract DRI  
7: GA 53 & Beechwood Boulevard

no build a.m.

| Intersection             |        |        |          |        |      |      |
|--------------------------|--------|--------|----------|--------|------|------|
| Int Delay, s/veh         | 2.6    |        |          |        |      |      |
| Movement                 | EBL    | EBR    | NBL      | NBT    | SBT  | SBR  |
| Vol, veh/h               | 6      | 45     | 30       | 869    | 2215 | 2    |
| Conflicting Peds, #/hr   | 0      | 0      | 0        | 0      | 0    | 0    |
| Sign Control             | Stop   | Stop   | Free     | Free   | Free | Free |
| RT Channelized           | -      | Yield  | -        | Yield  | -    | None |
| Storage Length           | 0      | 0      | 200      | -      | -    | 360  |
| Veh in Median Storage, # | 0      | -      | -        | 0      | 0    | -    |
| Grade, %                 | 0      | -      | -        | 1      | 0    | -    |
| Peak Hour Factor         | 82     | 82     | 87       | 87     | 89   | 89   |
| Heavy Vehicles, %        | 0      | 0      | 0        | 1      | 0    | 0    |
| Mvmt Flow                | 7      | 55     | 34       | 999    | 2489 | 2    |
| Major/Minor              | Minor2 | Major1 |          | Major2 |      |      |
| Conflicting Flow All     | 3057   | 1244   | 2489     | 0      | -    | 0    |
| Stage 1                  | 2489   | -      | -        | -      | -    | -    |
| Stage 2                  | 568    | -      | -        | -      | -    | -    |
| Critical Hdwy            | 6.8    | 6.9    | 4.1      | -      | -    | -    |
| Critical Hdwy Stg 1      | 5.8    | -      | -        | -      | -    | -    |
| Critical Hdwy Stg 2      | 5.8    | -      | -        | -      | -    | -    |
| Follow-up Hdwy           | 3.5    | 3.3    | 2.2      | -      | -    | -    |
| Pot Cap-1 Maneuver       | 10     | 169    | 187      | -      | -    | -    |
| Stage 1                  | 50     | -      | -        | -      | -    | -    |
| Stage 2                  | 536    | -      | -        | -      | -    | -    |
| Platoon blocked, %       |        |        |          | -      | -    | -    |
| Mov Cap-1 Maneuver       | 8      | 169    | 187      | -      | -    | -    |
| Mov Cap-2 Maneuver       | 8      | -      | -        | -      | -    | -    |
| Stage 1                  | 50     | -      | -        | -      | -    | -    |
| Stage 2                  | 439    | -      | -        | -      | -    | -    |
| Approach                 | EB     | NB     |          | SB     |      |      |
| HCM Control Delay, s     | 133.9  | 1      |          | 0      |      |      |
| HCM LOS                  | F      |        |          |        |      |      |
| Minor Lane/Major Mvmt    | NBL    | NBT    | EBLn1    | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)         | 187    | -      | 8        | 169    | -    | -    |
| HCM Lane V/C Ratio       | 0.184  | -      | 0.915    | 0.325  | -    | -    |
| HCM Control Delay (s)    | 28.6   | -      | \$ 866.6 | 36.2   | -    | -    |
| HCM Lane LOS             | D      | -      | F        | E      | -    | -    |
| HCM 95th %tile Q(veh)    | 0.7    | -      | 1.6      | 1.3    | -    | -    |



## Lanier Tract DRI

## 5: GA 53 &amp; Lanier Valley Dr/Ahaluna Dr

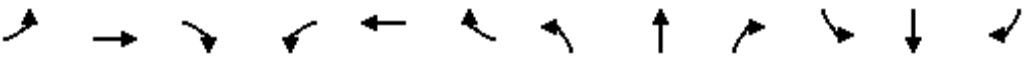
no build a.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Volume (vph)               | 21                                                                                | 6                                                                                 | 127                                                                               | 41                                                                                | 3                                                                                 | 22                                                                                | 61                                                                                  | 774                                                                                 | 12                                                                                  | 15                                                                                  | 2099                                                                                | 0                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 2%                                                                                |                                                                                   |                                                                                   | -4%                                                                               |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 100                                                                                 |                                                                                     | 0                                                                                   | 140                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.889                                                                             |                                                                                   |                                                                                   | 0.954                                                                             |                                                                                   |                                                                                     | 0.998                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   | 0.993                                                                             |                                                                                   |                                                                                   | 0.970                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1661                                                                              | 0                                                                                 | 0                                                                                 | 1793                                                                              | 0                                                                                 | 1796                                                                                | 3516                                                                                | 0                                                                                   | 1814                                                                                | 3628                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.940                                                                             |                                                                                   |                                                                                   | 0.380                                                                             |                                                                                   | 0.035                                                                               |                                                                                     |                                                                                     | 0.309                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1572                                                                              | 0                                                                                 | 0                                                                                 | 703                                                                               | 0                                                                                 | 66                                                                                  | 3516                                                                                | 0                                                                                   | 590                                                                                 | 3628                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 71                                                                                |                                                                                   |                                                                                   | 14                                                                                |                                                                                   |                                                                                     | 4                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 340                                                                               |                                                                                   |                                                                                   | 322                                                                               |                                                                                   |                                                                                     | 888                                                                                 |                                                                                     |                                                                                     | 1417                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.7                                                                               |                                                                                   |                                                                                   | 7.3                                                                               |                                                                                   |                                                                                     | 13.5                                                                                |                                                                                     |                                                                                     | 21.5                                                                                |                                                                                     |
| Peak Hour Factor           | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.83                                                                              | 0.83                                                                              | 0.83                                                                              | 0.85                                                                                | 0.85                                                                                | 0.85                                                                                | 0.87                                                                                | 0.87                                                                                | 0.87                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 23                                                                                | 7                                                                                 | 140                                                                               | 49                                                                                | 4                                                                                 | 27                                                                                | 72                                                                                  | 911                                                                                 | 14                                                                                  | 17                                                                                  | 2413                                                                                | 0                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 170                                                                               | 0                                                                                 | 0                                                                                 | 80                                                                                | 0                                                                                 | 72                                                                                  | 925                                                                                 | 0                                                                                   | 17                                                                                  | 2413                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 |                                                                                     | 0                                                                                   | 336                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   |                                                                                     | 0                                                                                   | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 8                                                                                 | 8                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 10.6                                                                                | 23.0                                                                                |                                                                                     | 23.0                                                                                | 23.0                                                                                |                                                                                     |

# Lanier Tract DRI

## 5: GA 53 & Lanier Valley Dr/Ahaluna Dr

no build a.m.

|                       |  |       |     |       |       |     |       |       |     |       |       |     |
|-----------------------|------------------------------------------------------------------------------------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Lane Group            | EBL                                                                                | EBT   | EBR | WBL   | WBT   | WBR | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
| Total Split (s)       | 24.0                                                                               | 24.0  |     | 24.0  | 24.0  |     | 12.0  | 126.0 |     | 114.0 | 114.0 |     |
| Total Split (%)       | 16.0%                                                                              | 16.0% |     | 16.0% | 16.0% |     | 8.0%  | 84.0% |     | 76.0% | 76.0% |     |
| Maximum Green (s)     | 17.4                                                                               | 17.4  |     | 17.4  | 17.4  |     | 6.4   | 119.9 |     | 107.9 | 107.9 |     |
| Yellow Time (s)       | 4.0                                                                                | 4.0   |     | 4.0   | 4.0   |     | 3.0   | 4.5   |     | 4.5   | 4.5   |     |
| All-Red Time (s)      | 2.6                                                                                | 2.6   |     | 2.6   | 2.6   |     | 2.6   | 1.6   |     | 1.6   | 1.6   |     |
| Lost Time Adjust (s)  |                                                                                    | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Lost Time (s)   |                                                                                    | 6.6   |     |       | 6.6   |     | 5.6   | 6.1   |     | 6.1   | 6.1   |     |
| Lead/Lag              |                                                                                    |       |     |       |       |     | Lead  |       |     | Lag   | Lag   |     |
| Lead-Lag Optimize?    |                                                                                    |       |     |       |       |     | Yes   |       |     | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0                                                                                | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode           | None                                                                               | None  |     | None  | None  |     | None  | C-Max |     | C-Max | C-Max |     |
| Act Effect Green (s)  |                                                                                    | 15.4  |     |       | 15.4  |     | 122.4 | 121.9 |     | 110.1 | 110.1 |     |
| Actuated g/C Ratio    |                                                                                    | 0.10  |     |       | 0.10  |     | 0.82  | 0.81  |     | 0.73  | 0.73  |     |
| v/c Ratio             |                                                                                    | 0.76  |     |       | 0.95  |     | 0.58  | 0.32  |     | 0.04  | 0.91  |     |
| Control Delay         |                                                                                    | 58.3  |     |       | 139.1 |     | 52.0  | 2.0   |     | 6.3   | 22.8  |     |
| Queue Delay           |                                                                                    | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay           |                                                                                    | 58.3  |     |       | 139.1 |     | 52.0  | 2.0   |     | 6.3   | 22.8  |     |
| LOS                   |                                                                                    | E     |     |       | F     |     | D     | A     |     | A     | C     |     |
| Approach Delay        |                                                                                    | 58.3  |     |       | 139.1 |     |       | 5.6   |     |       | 22.7  |     |
| Approach LOS          |                                                                                    | E     |     |       | F     |     |       | A     |     |       | C     |     |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 26 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 22.3

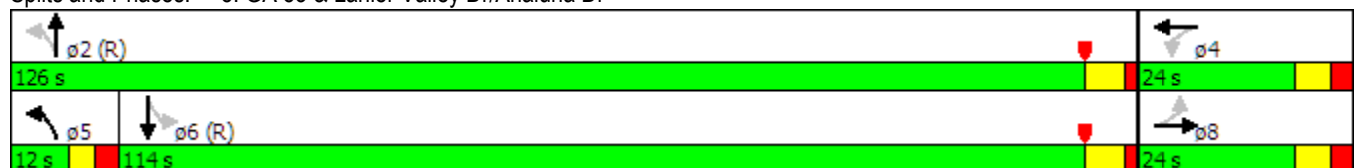
Intersection LOS: C

Intersection Capacity Utilization 80.9%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 5: GA 53 & Lanier Valley Dr/Ahaluna Dr



## Lanier Tract DRI

## 6: 53-Dawsonville Hwy &amp; Academy Sports

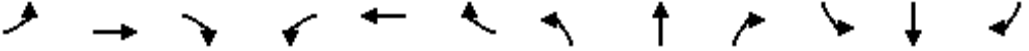
no build a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |  |  |  |  |  |  |  |
| Volume (vph)               | 2                                                                                 | 0                                                                                 | 7                                                                                 | 2                                                                                 | 0                                                                                 | 0                                                                                 | 12                                                                                  | 817                                                                                 | 10                                                                                  | 6                                                                                   | 2196                                                                                | 4                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 4%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 70                                                                                | 200                                                                                 |                                                                                     | 170                                                                                 | 190                                                                                 |                                                                                     | 360                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1805                                                                              | 1900                                                                              | 1615                                                                              | 1769                                                                              | 1862                                                                              | 1862                                                                              | 1796                                                                                | 3556                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 0.037                                                                               |                                                                                     |                                                                                     | 0.299                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1900                                                                              | 1900                                                                              | 1615                                                                              | 1862                                                                              | 1862                                                                              | 1862                                                                              | 70                                                                                  | 3556                                                                                | 1607                                                                                | 568                                                                                 | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 67                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 68                                                                                  |                                                                                     |                                                                                     | 68                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 262                                                                               |                                                                                   |                                                                                   | 246                                                                               |                                                                                   |                                                                                     | 1836                                                                                |                                                                                     |                                                                                     | 685                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.1                                                                               |                                                                                   |                                                                                   | 6.7                                                                               |                                                                                   |                                                                                     | 27.8                                                                                |                                                                                     |                                                                                     | 10.4                                                                                |                                                                                     |
| Peak Hour Factor           | 0.67                                                                              | 0.67                                                                              | 0.67                                                                              | 0.50                                                                              | 0.50                                                                              | 0.50                                                                              | 0.86                                                                                | 0.86                                                                                | 0.86                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 3                                                                                 | 0                                                                                 | 10                                                                                | 4                                                                                 | 0                                                                                 | 0                                                                                 | 14                                                                                  | 950                                                                                 | 12                                                                                  | 7                                                                                   | 2440                                                                                | 4                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 3                                                                                 | 0                                                                                 | 10                                                                                | 4                                                                                 | 0                                                                                 | 0                                                                                 | 14                                                                                  | 950                                                                                 | 12                                                                                  | 7                                                                                   | 2440                                                                                | 4                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              |                                                                                   | Perm                                                                              | Perm                                                                              |                                                                                   | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 2                                                                                   |                                                                                     | 2                                                                                   | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 42.0                                                                              | 42.0                                                                              | 42.0                                                                              | 42.4                                                                              | 42.4                                                                              | 42.4                                                                              | 11.4                                                                                | 30.3                                                                                | 30.3                                                                                | 11.0                                                                                | 29.3                                                                                | 29.3                                                                                |

# Lanier Tract DRI

## 6: 53-Dawsonville Hwy & Academy Sports

no build a.m.

|                         |  |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 42.4                                                                               | 42.4  | 42.4  | 42.4  | 42.4  | 42.4  | 11.4  | 96.6  | 96.6  | 11.0  | 96.2  | 96.2  |
| Total Split (%)         | 28.3%                                                                              | 28.3% | 28.3% | 28.3% | 28.3% | 28.3% | 7.6%  | 64.4% | 64.4% | 7.3%  | 64.1% | 64.1% |
| Maximum Green (s)       | 36.0                                                                               | 36.0  | 36.0  | 36.0  | 36.0  | 36.0  | 5.0   | 90.4  | 90.4  | 5.0   | 90.0  | 90.0  |
| Yellow Time (s)         | 3.4                                                                                | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 4.3   | 4.3   | 3.0   | 4.3   | 4.3   |
| All-Red Time (s)        | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 1.9   | 1.9   | 3.0   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.4                                                                                | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.2   | 6.2   | 6.0   | 6.2   | 6.2   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           | 4.0                                                                                | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 23.0                                                                               | 23.0  | 23.0  | 32.0  | 32.0  | 32.0  |       | 20.0  | 20.0  |       | 19.0  | 19.0  |
| Pedestrian Calls (#/hr) | 0                                                                                  | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    | 6.1                                                                                |       | 6.1   | 6.1   |       |       | 137.2 | 139.9 | 139.9 | 136.1 | 137.4 | 137.4 |
| Actuated g/C Ratio      | 0.04                                                                               |       | 0.04  | 0.04  |       |       | 0.91  | 0.93  | 0.93  | 0.91  | 0.92  | 0.92  |
| v/c Ratio               | 0.04                                                                               |       | 0.08  | 0.05  |       |       | 0.11  | 0.29  | 0.01  | 0.01  | 0.74  | 0.00  |
| Control Delay           | 69.5                                                                               |       | 1.1   | 70.0  |       |       | 4.4   | 0.9   | 0.0   | 0.8   | 3.9   | 0.0   |
| Queue Delay             | 0.0                                                                                |       | 0.0   | 0.0   |       |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay             | 69.5                                                                               |       | 1.1   | 70.0  |       |       | 4.4   | 0.9   | 0.0   | 0.8   | 3.9   | 0.0   |
| LOS                     | E                                                                                  |       | A     | E     |       |       | A     | A     | A     | A     | A     | A     |
| Approach Delay          |                                                                                    |       |       |       |       |       |       | 1.0   |       |       | 3.9   |       |
| Approach LOS            |                                                                                    |       |       |       |       |       |       | A     |       |       | A     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 27 (18%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 145

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 3.2

Intersection LOS: A

Intersection Capacity Utilization 84.9%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 6: 53-Dawsonville Hwy & Academy Sports

|                                                                                        |                                                                                            |                                                                                          |
|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
|  p1 |  p2 (R) |  p4 |
| 11.4 s                                                                                 | 96.6 s                                                                                     | 42.4 s                                                                                   |
|  p5 |  p6 (R) |  p8 |
| 11.4 s                                                                                 | 96.2 s                                                                                     | 42.4 s                                                                                   |

# Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 & McEver Road/McEver

no build a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |                                                                                   |   |  |  |  |  |  |
| Volume (vph)               | 431                                                                               | 31                                                                                | 378                                                                               | 46                                                                                | 21                                                                                | 20                                                                                | 311                                                                                 | 513                                                                                 | 61                                                                                  | 31                                                                                  | 1292                                                                                | 914                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 1%                                                                                |                                                                                   |                                                                                   | 5%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 180                                                                               |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 310                                                                                 |                                                                                     | 185                                                                                 | 255                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 50                                                                                |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.872                                                                             | 0.850                                                                             |                                                                                   | 0.927                                                                             |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 3484                                                                              | 1566                                                                              | 1527                                                                              | 1760                                                                              | 1717                                                                              | 0                                                                                 | 3484                                                                                | 3487                                                                                | 1575                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   | 0.598                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 3484                                                                              | 1566                                                                              | 1527                                                                              | 1108                                                                              | 1717                                                                              | 0                                                                                 | 3484                                                                                | 3487                                                                                | 1575                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 183                                                                               | 207                                                                               |                                                                                   | 31                                                                                |                                                                                   |                                                                                     |                                                                                     | 184                                                                                 |                                                                                     |                                                                                     | 544                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 45                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 580                                                                               |                                                                                   |                                                                                   | 331                                                                               |                                                                                   |                                                                                     | 921                                                                                 |                                                                                     |                                                                                     | 1624                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 8.8                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                     | 14.0                                                                                |                                                                                     |                                                                                     | 24.6                                                                                |                                                                                     |
| Peak Hour Factor           | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.62                                                                              | 0.62                                                                              | 0.62                                                                              | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 3%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 444                                                                               | 32                                                                                | 390                                                                               | 74                                                                                | 34                                                                                | 32                                                                                | 334                                                                                 | 552                                                                                 | 66                                                                                  | 34                                                                                  | 1436                                                                                | 1016                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   | 47%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 444                                                                               | 215                                                                               | 207                                                                               | 74                                                                                | 66                                                                                | 0                                                                                 | 334                                                                                 | 552                                                                                 | 66                                                                                  | 34                                                                                  | 1436                                                                                | 1016                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 24                                                                                |                                                                                   |                                                                                   | 24                                                                                |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                             | NA                                                                                |                                                                                   | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 8                                                                                 |                                                                                   | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 8                                                                                 | 8                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 13.2                                                                              | 50.2                                                                              | 50.2                                                                              | 11.6                                                                              | 48.2                                                                              |                                                                                   | 13.4                                                                                | 35.6                                                                                | 35.6                                                                                | 12.9                                                                                | 44.6                                                                                | 44.6                                                                                |

# Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 & McEver Road/McEver

no build a.m.

|                         |  |       |       |      |       |     |       |       |       |      |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|------|-------|-----|-------|-------|-------|------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL  | WBT   | WBR | NBL   | NBT   | NBR   | SBL  | SBT   | SBR   |
| Total Split (s)         | 23.0                                                                               | 59.1  | 59.1  | 12.1 | 48.2  |     | 20.0  | 64.6  | 64.6  | 14.2 | 58.8  | 58.8  |
| Total Split (%)         | 15.3%                                                                              | 39.4% | 39.4% | 8.1% | 32.1% |     | 13.3% | 43.1% | 43.1% | 9.5% | 39.2% | 39.2% |
| Maximum Green (s)       | 15.7                                                                               | 51.8  | 51.8  | 5.6  | 40.9  |     | 12.5  | 58.0  | 58.0  | 7.0  | 52.2  | 52.2  |
| Yellow Time (s)         | 4.3                                                                                | 4.3   | 4.3   | 3.5  | 4.3   |     | 4.5   | 4.4   | 4.4   | 4.2  | 4.4   | 4.4   |
| All-Red Time (s)        | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 2.2   | 2.2   | 3.0  | 2.2   | 2.2   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Lost Time (s)     | 7.3                                                                                | 7.3   | 7.3   | 6.5  | 7.3   |     | 7.5   | 6.6   | 6.6   | 7.2  | 6.6   | 6.6   |
| Lead/Lag                | Lead                                                                               | Lag   | Lag   | Lead | Lag   |     | Lag   | Lag   | Lag   | Lead | Lead  | Lead  |
| Lead-Lag Optimize?      | Yes                                                                                | Yes   | Yes   | Yes  | Yes   |     | Yes   | Yes   | Yes   | Yes  | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None | None  |     | None  | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s)           |                                                                                    | 4.0   | 4.0   |      | 4.0   |     |       | 4.0   | 4.0   |      | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    | 38.0  | 38.0  |      | 36.0  |     |       | 25.0  | 25.0  |      | 34.0  | 34.0  |
| Pedestrian Calls (#/hr) |                                                                                    | 0     | 0     |      | 0     |     |       | 0     | 0     |      | 0     | 0     |
| Act Effect Green (s)    | 16.1                                                                               | 17.5  | 17.5  | 14.0 | 8.8   |     | 12.5  | 93.5  | 93.5  | 8.3  | 86.5  | 86.5  |
| Actuated g/C Ratio      | 0.11                                                                               | 0.12  | 0.12  | 0.09 | 0.06  |     | 0.08  | 0.62  | 0.62  | 0.06 | 0.58  | 0.58  |
| v/c Ratio               | 1.19                                                                               | 0.62  | 0.57  | 0.58 | 0.51  |     | 1.15  | 0.25  | 0.06  | 0.34 | 0.69  | 0.87  |
| Control Delay           | 164.3                                                                              | 20.5  | 13.5  | 70.3 | 52.3  |     | 163.5 | 17.6  | 1.5   | 81.4 | 21.9  | 15.3  |
| Queue Delay             | 0.0                                                                                | 0.0   | 0.0   | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Delay             | 164.3                                                                              | 20.5  | 13.5  | 70.3 | 52.3  |     | 163.5 | 17.6  | 1.5   | 81.4 | 21.9  | 15.3  |
| LOS                     | F                                                                                  | C     | B     | E    | D     |     | F     | B     | A     | F    | C     | B     |
| Approach Delay          |                                                                                    | 92.6  |       |      | 61.8  |     |       | 67.7  |       |      | 20.0  |       |
| Approach LOS            |                                                                                    | F     |       |      | E     |     |       | E     |       |      | C     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 19 (13%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.19

Intersection Signal Delay: 45.7

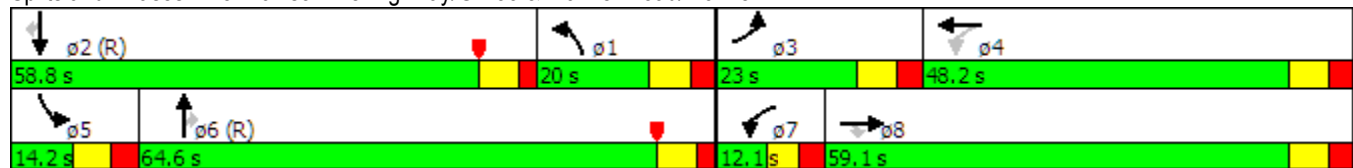
Intersection LOS: D

Intersection Capacity Utilization 87.5%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 8: Dawsonville Highway/GA 53 & McEver Road/McEver



## Lanier Tract DRI

## 9: Dawsonville Highway &amp; Greenhill Circle/Greenhill Circle

no build a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 74                                                                                | 1                                                                                 | 156                                                                               | 7                                                                                 | 1                                                                                 | 4                                                                                 | 149                                                                                 | 832                                                                                 | 11                                                                                  | 13                                                                                  | 1550                                                                                | 57                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 3%                                                                                |                                                                                   |                                                                                   | 7%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 190                                                                                 |                                                                                     | 190                                                                                 | 185                                                                                 |                                                                                     | 100                                                                                 |
| Storage Lanes              | 0                                                                                 |                                                                                   | 1                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              |                                                                                   | 0.953                                                                             |                                                                                   |                                                                                   | 0.957                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1784                                                                              | 1591                                                                              | 0                                                                                 | 1755                                                                              | 1558                                                                              | 1796                                                                                | 3522                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   | 0.721                                                                             |                                                                                   |                                                                                   | 0.751                                                                             |                                                                                   | 0.082                                                                               |                                                                                     |                                                                                     | 0.296                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1349                                                                              | 1591                                                                              | 0                                                                                 | 1377                                                                              | 1558                                                                              | 155                                                                                 | 3522                                                                                | 1607                                                                                | 562                                                                                 | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 143                                                                               |                                                                                   |                                                                                   | 102                                                                               |                                                                                     |                                                                                     | 57                                                                                  |                                                                                     |                                                                                     | 101                                                                                 |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 288                                                                               |                                                                                   |                                                                                   | 254                                                                               |                                                                                   |                                                                                     | 778                                                                                 |                                                                                     |                                                                                     | 921                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.9                                                                               |                                                                                   |                                                                                   | 6.9                                                                               |                                                                                   |                                                                                     | 11.8                                                                                |                                                                                     |                                                                                     | 14.0                                                                                |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.69                                                                              | 0.69                                                                              | 0.69                                                                              | 0.86                                                                                | 0.86                                                                                | 0.86                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 82                                                                                | 1                                                                                 | 173                                                                               | 10                                                                                | 1                                                                                 | 6                                                                                 | 173                                                                                 | 967                                                                                 | 13                                                                                  | 14                                                                                  | 1685                                                                                | 62                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 83                                                                                | 173                                                                               | 0                                                                                 | 11                                                                                | 6                                                                                 | 173                                                                                 | 967                                                                                 | 13                                                                                  | 14                                                                                  | 1685                                                                                | 62                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.02                                                                              | 1.02                                                                              | 1.02                                                                              | 1.05                                                                              | 1.05                                                                              | 1.05                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              | 23.0                                                                              | 39.9                                                                              | 39.9                                                                              | 39.9                                                                              | 11.0                                                                                | 28.0                                                                                | 28.0                                                                                | 10.0                                                                                | 36.0                                                                                | 36.0                                                                                |

# Lanier Tract DRI

## 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle

no build a.m.

| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Total Split (s)         | 39.9  | 39.9  | 39.9  | 39.9  | 39.9  | 39.9  | 22.0  | 100.1 | 100.1 | 10.0  | 88.1  | 88.1  |
| Total Split (%)         | 26.6% | 26.6% | 26.6% | 26.6% | 26.6% | 26.6% | 14.7% | 66.7% | 66.7% | 6.7%  | 58.7% | 58.7% |
| Maximum Green (s)       | 34.0  | 34.0  | 34.0  | 34.0  | 34.0  | 34.0  | 16.0  | 94.1  | 94.1  | 5.0   | 82.1  | 82.1  |
| Yellow Time (s)         | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 4.4   | 4.4   | 3.5   | 4.4   | 4.4   |
| All-Red Time (s)        | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 3.0   | 1.6   | 1.6   | 1.5   | 1.6   | 1.6   |
| Lost Time Adjust (s)    |       | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |       | 5.9   | 5.9   |       | 5.9   | 5.9   | 6.0   | 6.0   | 6.0   | 5.0   | 6.0   | 6.0   |
| Lead/Lag                |       |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None  | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           |       |       |       | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     |       |       |       | 30.0  | 30.0  | 30.0  |       | 18.0  | 18.0  |       | 26.0  | 26.0  |
| Pedestrian Calls (#/hr) |       |       |       | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    |       | 14.6  | 14.6  |       | 14.6  | 14.6  | 123.5 | 119.1 | 119.1 | 108.8 | 102.1 | 102.1 |
| Actuated g/C Ratio      |       | 0.10  | 0.10  |       | 0.10  | 0.10  | 0.82  | 0.79  | 0.79  | 0.73  | 0.68  | 0.68  |
| v/c Ratio               |       | 0.64  | 0.61  |       | 0.08  | 0.02  | 0.58  | 0.35  | 0.01  | 0.03  | 0.69  | 0.05  |
| Control Delay           |       | 85.5  | 24.1  |       | 59.9  | 0.2   | 29.1  | 4.6   | 0.0   | 4.0   | 14.0  | 0.8   |
| Queue Delay             |       | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.1   | 0.0   |
| Total Delay             |       | 85.5  | 24.1  |       | 59.9  | 0.2   | 29.1  | 4.6   | 0.0   | 4.0   | 14.1  | 0.8   |
| LOS                     |       | F     | C     |       | E     | A     | C     | A     | A     | A     | B     | A     |
| Approach Delay          |       | 44.0  |       |       | 38.8  |       |       | 8.2   |       |       | 13.5  |       |
| Approach LOS            |       | D     |       |       | D     |       |       | A     |       |       | B     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.69

Intersection Signal Delay: 14.2

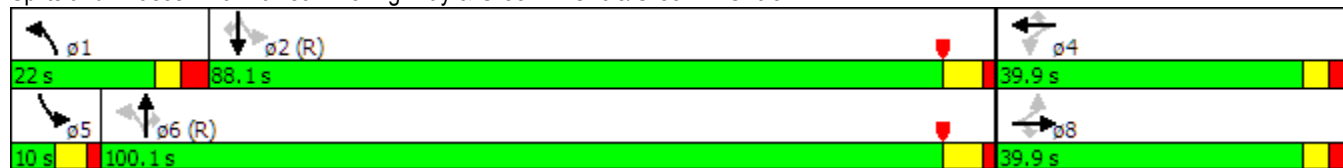
Intersection LOS: B

Intersection Capacity Utilization 76.8%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle





## Lanier Tract DRI

## 10: Dawsonville Highway &amp; Shallowford Rd/Best Buy

no build a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |                                                                                   |  |  |   |  |  |  |  |  |
| Volume (vph)               | 152                                                                               | 2                                                                                 | 9                                                                                 | 2                                                                                 | 4                                                                                 | 3                                                                                 | 11                                                                                  | 815                                                                                 | 14                                                                                  | 1                                                                                   | 1379                                                                                | 373                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | -1%                                                                               |                                                                                   |                                                                                   | 10%                                                                               |                                                                                   |                                                                                     | -4%                                                                                 |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 350                                                                               |                                                                                   | 350                                                                               | 0                                                                                 |                                                                                   | 0                                                                                 | 350                                                                                 |                                                                                     | 150                                                                                 | 265                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 100                                                                               |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             | 0.953                                                                             |                                                                                   |                                                                                   | 0.982                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1723                                                                              | 1729                                                                              | 1623                                                                              | 0                                                                                 | 1773                                                                              | 1534                                                                              | 1841                                                                                | 3646                                                                                | 1647                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             | 0.953                                                                             |                                                                                   |                                                                                   | 0.982                                                                             |                                                                                   | 0.125                                                                               |                                                                                     |                                                                                     | 0.292                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1723                                                                              | 1729                                                                              | 1623                                                                              | 0                                                                                 | 1773                                                                              | 1534                                                                              | 242                                                                                 | 3646                                                                                | 1647                                                                                | 558                                                                                 | 3592                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 113                                                                               |                                                                                   |                                                                                   | 119                                                                               |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     | 218                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 653                                                                               |                                                                                   |                                                                                   | 178                                                                               |                                                                                   |                                                                                     | 957                                                                                 |                                                                                     |                                                                                     | 778                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 9.9                                                                               |                                                                                   |                                                                                   | 4.9                                                                               |                                                                                   |                                                                                     | 14.5                                                                                |                                                                                     |                                                                                     | 11.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.84                                                                              | 0.84                                                                              | 0.84                                                                              | 0.56                                                                              | 0.56                                                                              | 0.56                                                                              | 0.83                                                                                | 0.83                                                                                | 0.83                                                                                | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 181                                                                               | 2                                                                                 | 11                                                                                | 4                                                                                 | 7                                                                                 | 5                                                                                 | 13                                                                                  | 982                                                                                 | 17                                                                                  | 1                                                                                   | 1483                                                                                | 401                                                                                 |
| Shared Lane Traffic (%)    | 49%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 92                                                                                | 91                                                                                | 11                                                                                | 0                                                                                 | 11                                                                                | 5                                                                                 | 13                                                                                  | 982                                                                                 | 17                                                                                  | 1                                                                                   | 1483                                                                                | 401                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 0.99                                                                              | 0.99                                                                              | 0.99                                                                              | 1.07                                                                              | 1.07                                                                              | 1.07                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Split                                                                             | NA                                                                                | Perm                                                                              | Split                                                                             | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | Perm                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 3                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 3                                                                                 | 3                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 36.7                                                                              | 36.7                                                                              | 36.7                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                                | 28.8                                                                                | 28.8                                                                                | 30.8                                                                                | 30.8                                                                                | 30.8                                                                                |

# Lanier Tract DRI

## 10: Dawsonville Highway & Shallowford Rd/Best Buy

no build a.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Total Split (s)         | 36.7                                                                              | 36.7                                                                              | 36.7                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                               | 74.4                                                                                | 74.4                                                                                | 63.6                                                                                | 63.6                                                                                | 63.6                                                                                |
| Total Split (%)         | 24.5%                                                                             | 24.5%                                                                             | 24.5%                                                                             | 25.9%                                                                             | 25.9%                                                                             | 25.9%                                                                             | 7.2%                                                                               | 49.6%                                                                               | 49.6%                                                                               | 42.4%                                                                               | 42.4%                                                                               | 42.4%                                                                               |
| Maximum Green (s)       | 30.0                                                                              | 30.0                                                                              | 30.0                                                                              | 33.0                                                                              | 33.0                                                                              | 33.0                                                                              | 5.0                                                                                | 67.6                                                                                | 67.6                                                                                | 56.8                                                                                | 56.8                                                                                | 56.8                                                                                |
| Yellow Time (s)         | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 4.9                                                                                 | 4.9                                                                                 | 4.9                                                                                 | 4.9                                                                                 | 4.9                                                                                 |
| All-Red Time (s)        | 2.2                                                                               | 2.2                                                                               | 2.2                                                                               | 2.9                                                                               | 2.9                                                                               | 2.9                                                                               | 2.8                                                                                | 1.9                                                                                 | 1.9                                                                                 | 1.9                                                                                 | 1.9                                                                                 | 1.9                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.7                                                                               | 6.7                                                                               | 6.7                                                                               |                                                                                   | 5.9                                                                               | 5.9                                                                               | 5.8                                                                                | 6.8                                                                                 | 6.8                                                                                 | 6.8                                                                                 | 6.8                                                                                 | 6.8                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lag                                                                               | Lead                                                                               |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 | Lag                                                                                 |
| Lead-Lag Optimize?      | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                                |                                                                                     |                                                                                     | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                               | C-Min                                                                               | C-Min                                                                               | C-Min                                                                               | C-Min                                                                               | C-Min                                                                               |
| Walk Time (s)           | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                    | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |
| Flash Dont Walk (s)     | 26.0                                                                              | 26.0                                                                              | 26.0                                                                              | 29.0                                                                              | 29.0                                                                              | 29.0                                                                              |                                                                                    | 18.0                                                                                | 18.0                                                                                | 20.0                                                                                | 20.0                                                                                | 20.0                                                                                |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Act Effect Green (s)    | 13.4                                                                              | 13.4                                                                              | 13.4                                                                              |                                                                                   | 6.5                                                                               | 6.5                                                                               | 118.7                                                                              | 117.7                                                                               | 117.7                                                                               | 113.0                                                                               | 113.0                                                                               | 113.0                                                                               |
| Actuated g/C Ratio      | 0.09                                                                              | 0.09                                                                              | 0.09                                                                              |                                                                                   | 0.04                                                                              | 0.04                                                                              | 0.79                                                                               | 0.78                                                                                | 0.78                                                                                | 0.75                                                                                | 0.75                                                                                | 0.75                                                                                |
| v/c Ratio               | 0.60                                                                              | 0.59                                                                              | 0.04                                                                              |                                                                                   | 0.14                                                                              | 0.03                                                                              | 0.05                                                                               | 0.34                                                                                | 0.01                                                                                | 0.00                                                                                | 0.55                                                                                | 0.31                                                                                |
| Control Delay           | 81.2                                                                              | 80.6                                                                              | 0.3                                                                               |                                                                                   | 72.5                                                                              | 0.3                                                                               | 5.8                                                                                | 6.1                                                                                 | 0.0                                                                                 | 7.0                                                                                 | 10.2                                                                                | 4.2                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.3                                                                                 | 0.0                                                                                 |
| Total Delay             | 81.2                                                                              | 80.6                                                                              | 0.3                                                                               |                                                                                   | 72.5                                                                              | 0.3                                                                               | 5.8                                                                                | 6.1                                                                                 | 0.0                                                                                 | 7.0                                                                                 | 10.5                                                                                | 4.2                                                                                 |
| LOS                     | F                                                                                 | F                                                                                 | A                                                                                 |                                                                                   | E                                                                                 | A                                                                                 | A                                                                                  | A                                                                                   | A                                                                                   | A                                                                                   | B                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 76.3                                                                              |                                                                                   |                                                                                   | 49.9                                                                              |                                                                                   |                                                                                    | 6.0                                                                                 |                                                                                     |                                                                                     | 9.1                                                                                 |                                                                                     |
| Approach LOS            |                                                                                   | E                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 45 (30%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 12.5

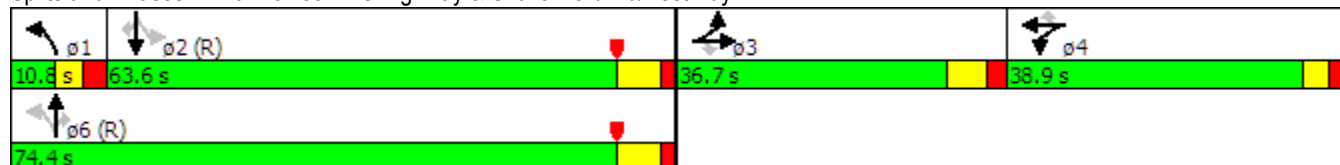
Intersection LOS: B

Intersection Capacity Utilization 62.6%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 10: Dawsonville Highway & Shallowford Rd/Best Buy



Lanier Tract DRI  
1: Sportsman Club Road & Strickland Drive

no build p.m.

| Intersection             |        |       |        |      |        |           |
|--------------------------|--------|-------|--------|------|--------|-----------|
| Int Delay, s/veh         | 1.7    |       |        |      |        |           |
|                          |        |       |        |      |        |           |
| Movement                 | WBL    | WBR   |        | NBT  | NBR    | SBL SBT   |
| Vol, veh/h               | 8      | 0     |        | 32   | 10     | 0 25      |
| Conflicting Peds, #/hr   | 0      | 0     |        | 0    | 0      | 0 0       |
| Sign Control             | Stop   | Stop  |        | Free | Free   | Free Free |
| RT Channelized           | -      | None  |        | -    | None   | - None    |
| Storage Length           | 0      | -     |        | -    | -      | - -       |
| Veh in Median Storage, # | 0      | -     |        | 0    | -      | - 0       |
| Grade, %                 | 0      | -     |        | 0    | -      | - 0       |
| Peak Hour Factor         | 44     | 44    |        | 86   | 86     | 82 82     |
| Heavy Vehicles, %        | 2      | 2     |        | 2    | 2      | 2 2       |
| Mvmt Flow                | 18     | 0     |        | 37   | 12     | 0 30      |
|                          |        |       |        |      |        |           |
| Major/Minor              | Minor1 |       | Major1 |      | Major2 |           |
| Conflicting Flow All     | 73     | 43    |        | 0    | 0      | 49 0      |
| Stage 1                  | 43     | -     |        | -    | -      | - -       |
| Stage 2                  | 30     | -     |        | -    | -      | - -       |
| Critical Hdwy            | 6.42   | 6.22  |        | -    | -      | 4.12 -    |
| Critical Hdwy Stg 1      | 5.42   | -     |        | -    | -      | - -       |
| Critical Hdwy Stg 2      | 5.42   | -     |        | -    | -      | - -       |
| Follow-up Hdwy           | 3.518  | 3.318 |        | -    | -      | 2.218 -   |
| Pot Cap-1 Maneuver       | 931    | 1027  |        | -    | -      | 1558 -    |
| Stage 1                  | 979    | -     |        | -    | -      | - -       |
| Stage 2                  | 993    | -     |        | -    | -      | - -       |
| Platoon blocked, %       |        |       |        | -    | -      | -         |
| Mov Cap-1 Maneuver       | 931    | 1027  |        | -    | -      | 1558 -    |
| Mov Cap-2 Maneuver       | 931    | -     |        | -    | -      | - -       |
| Stage 1                  | 979    | -     |        | -    | -      | - -       |
| Stage 2                  | 993    | -     |        | -    | -      | - -       |
|                          |        |       |        |      |        |           |
| Approach                 | WB     |       | NB     |      | SB     |           |
| HCM Control Delay, s     | 8.9    |       | 0      |      | 0      |           |
| HCM LOS                  | A      |       |        |      |        |           |
|                          |        |       |        |      |        |           |
| Minor Lane/Major Mvmt    | NBT    | NBR   | WBLn1  | SBL  | SBT    |           |
| Capacity (veh/h)         | -      | -     | 931    | 1558 | -      |           |
| HCM Lane V/C Ratio       | -      | -     | 0.02   | -    | -      |           |
| HCM Control Delay (s)    | -      | -     | 8.9    | 0    | -      |           |
| HCM Lane LOS             | -      | -     | A      | A    | -      |           |
| HCM 95th %tile Q(veh)    | -      | -     | 0.1    | 0    | -      |           |

Lanier Tract DRI  
2: GA 53 & Sportsman Club Road

no build p.m.

| Intersection               |        |                        |      |                            |       |      |                                |           |      |           |      |      |
|----------------------------|--------|------------------------|------|----------------------------|-------|------|--------------------------------|-----------|------|-----------|------|------|
| Int Delay, s/veh           |        | 34.3                   |      |                            |       |      |                                |           |      |           |      |      |
|                            |        |                        |      |                            |       |      |                                |           |      |           |      |      |
| Movement                   | EBL    | EBT                    | EBR  | WBL                        | WBT   | WBR  | NBL                            | NBT       | NBR  | SBL       | SBT  | SBR  |
| Vol, veh/h                 | 17     | 1147                   | 0    | 2                          | 1845  | 21   | 0                              | 0         | 0    | 31        | 0    | 10   |
| Conflicting Peds, #/hr     | 0      | 0                      | 0    | 0                          | 0     | 0    | 0                              | 0         | 0    | 0         | 0    | 0    |
| Sign Control               | Free   | Free                   | Free | Free                       | Free  | Free | Stop                           | Stop      | Stop | Stop      | Stop | Stop |
| RT Channelized             | -      | -                      | None | -                          | -     | None | -                              | -         | None | -         | -    | None |
| Storage Length             | 0      | -                      | -    | 0                          | -     | -    | -                              | -         | -    | -         | -    | -    |
| Veh in Median Storage, #   | -      | 0                      | -    | -                          | 0     | -    | -                              | 0         | -    | -         | 0    | -    |
| Grade, %                   | -      | 0                      | -    | -                          | 0     | -    | -                              | 0         | -    | -         | 0    | -    |
| Peak Hour Factor           | 95     | 95                     | 95   | 96                         | 96    | 96   | 92                             | 92        | 92   | 66        | 66   | 66   |
| Heavy Vehicles, %          | 2      | 2                      | 2    | 2                          | 2     | 2    | 2                              | 2         | 2    | 2         | 2    | 2    |
| Mvmt Flow                  | 18     | 1207                   | 0    | 2                          | 1922  | 22   | 0                              | 0         | 0    | 47        | 0    | 15   |
|                            |        |                        |      |                            |       |      |                                |           |      |           |      |      |
| Major/Minor                | Major1 |                        |      | Major2                     |       |      | Minor1                         |           |      | Minor2    |      |      |
| Conflicting Flow All       | 1944   | 0                      | 0    | 1207                       | 0     | 0    | 2208                           | 3191      | 604  | 2576      | 3180 | 972  |
| Stage 1                    | -      | -                      | -    | -                          | -     | -    | 1243                           | 1243      | -    | 1937      | 1937 | -    |
| Stage 2                    | -      | -                      | -    | -                          | -     | -    | 965                            | 1948      | -    | 639       | 1243 | -    |
| Critical Hdwy              | 4.14   | -                      | -    | 4.14                       | -     | -    | 7.54                           | 6.54      | 6.94 | 7.54      | 6.54 | 6.94 |
| Critical Hdwy Stg 1        | -      | -                      | -    | -                          | -     | -    | 6.54                           | 5.54      | -    | 6.54      | 5.54 | -    |
| Critical Hdwy Stg 2        | -      | -                      | -    | -                          | -     | -    | 6.54                           | 5.54      | -    | 6.54      | 5.54 | -    |
| Follow-up Hdwy             | 2.22   | -                      | -    | 2.22                       | -     | -    | 3.52                           | 4.02      | 3.32 | 3.52      | 4.02 | 3.32 |
| Pot Cap-1 Maneuver         | 298    | -                      | -    | 574                        | -     | -    | 24                             | 10        | 441  | ~ 13      | 10   | 252  |
| Stage 1                    | -      | -                      | -    | -                          | -     | -    | 185                            | 245       | -    | 68        | 111  | -    |
| Stage 2                    | -      | -                      | -    | -                          | -     | -    | 274                            | 110       | -    | 431       | 245  | -    |
| Platoon blocked, %         |        | -                      | -    |                            | -     | -    |                                |           |      |           |      |      |
| Mov Cap-1 Maneuver         | 298    | -                      | -    | 574                        | -     | -    | 21                             | 9         | 441  | ~ 12      | 9    | 252  |
| Mov Cap-2 Maneuver         | -      | -                      | -    | -                          | -     | -    | 21                             | 9         | -    | ~ 12      | 9    | -    |
| Stage 1                    | -      | -                      | -    | -                          | -     | -    | 174                            | 230       | -    | 64        | 111  | -    |
| Stage 2                    | -      | -                      | -    | -                          | -     | -    | 257                            | 110       | -    | 405       | 230  | -    |
|                            |        |                        |      |                            |       |      |                                |           |      |           |      |      |
| Approach                   | EB     |                        |      | WB                         |       |      | NB                             |           |      | SB        |      |      |
| HCM Control Delay, s       | 0.3    |                        |      | 0                          |       |      | 0                              |           |      | \$ 1780.7 |      |      |
| HCM LOS                    |        |                        |      |                            |       |      | A                              |           |      | F         |      |      |
|                            |        |                        |      |                            |       |      |                                |           |      |           |      |      |
| Minor Lane/Major Mvmt      | NBLn1  | EBL                    | EBT  | EBR                        | WBL   | WBT  | WBR                            | SBLn1     |      |           |      |      |
| Capacity (veh/h)           | -      | 298                    | -    | -                          | 574   | -    | -                              | 16        |      |           |      |      |
| HCM Lane V/C Ratio         | -      | 0.06                   | -    | -                          | 0.004 | -    | -                              | 3.883     |      |           |      |      |
| HCM Control Delay (s)      | 0      | 17.9                   | -    | -                          | 11.3  | -    |                                | \$ 1780.7 |      |           |      |      |
| HCM Lane LOS               | A      | C                      | -    | -                          | B     | -    | -                              | F         |      |           |      |      |
| HCM 95th %tile Q(veh)      | -      | 0.2                    | -    | -                          | 0     | -    | -                              | 8.5       |      |           |      |      |
| Notes                      |        |                        |      |                            |       |      |                                |           |      |           |      |      |
| ~: Volume exceeds capacity |        | \$: Delay exceeds 300s |      | +: Computation Not Defined |       |      | *: All major volume in platoon |           |      |           |      |      |

| Intersection             |        |        |       |        |      |      |
|--------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh         | 1.5    |        |       |        |      |      |
| Movement                 | EBL    | EBR    | NBL   | NBT    | SBT  | SBR  |
| Vol, veh/h               | 11     | 52     | 68    | 1822   | 1217 | 15   |
| Conflicting Peds, #/hr   | 0      | 0      | 0     | 0      | 0    | 0    |
| Sign Control             | Stop   | Stop   | Free  | Free   | Free | Free |
| RT Channelized           | -      | None   | -     | None   | -    | None |
| Storage Length           | 0      | 0      | 0     | -      | -    | 0    |
| Veh in Median Storage, # | 0      | -      | -     | 0      | 0    | -    |
| Grade, %                 | 0      | -      | -     | 0      | 0    | -    |
| Peak Hour Factor         | 76     | 76     | 95    | 95     | 100  | 100  |
| Heavy Vehicles, %        | 2      | 2      | 2     | 2      | 2    | 2    |
| Mvmt Flow                | 14     | 68     | 72    | 1918   | 1217 | 15   |
| Major/Minor              | Minor2 | Major1 |       | Major2 |      |      |
| Conflicting Flow All     | 2319   | 609    | 1217  | 0      | -    | 0    |
| Stage 1                  | 1217   | -      | -     | -      | -    | -    |
| Stage 2                  | 1102   | -      | -     | -      | -    | -    |
| Critical Hdwy            | 6.84   | 6.94   | 4.14  | -      | -    | -    |
| Critical Hdwy Stg 1      | 5.84   | -      | -     | -      | -    | -    |
| Critical Hdwy Stg 2      | 5.84   | -      | -     | -      | -    | -    |
| Follow-up Hdwy           | 3.52   | 3.32   | 2.22  | -      | -    | -    |
| Pot Cap-1 Maneuver       | 32     | 438    | 569   | -      | -    | -    |
| Stage 1                  | 243    | -      | -     | -      | -    | -    |
| Stage 2                  | 280    | -      | -     | -      | -    | -    |
| Platoon blocked, %       |        |        |       | -      | -    | -    |
| Mov Cap-1 Maneuver       | 28     | 438    | 569   | -      | -    | -    |
| Mov Cap-2 Maneuver       | 28     | -      | -     | -      | -    | -    |
| Stage 1                  | 243    | -      | -     | -      | -    | -    |
| Stage 2                  | 245    | -      | -     | -      | -    | -    |
| Approach                 | EB     | NB     |       | SB     |      |      |
| HCM Control Delay, s     | 52.1   | 0.4    |       | 0      |      |      |
| HCM LOS                  | F      |        |       |        |      |      |
| Minor Lane/Major Mvmt    | NBL    | NBT    | EBLn1 | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)         | 569    | -      | 28    | 438    | -    | -    |
| HCM Lane V/C Ratio       | 0.126  | -      | 0.517 | 0.156  | -    | -    |
| HCM Control Delay (s)    | 12.2   | -      | 229.1 | 14.7   | -    | -    |
| HCM Lane LOS             | B      | -      | F     | B      | -    | -    |
| HCM 95th %tile Q(veh)    | 0.4    | -      | 1.6   | 0.5    | -    | -    |

Lanier Tract DRI  
4: Canterbury Road & GA 53

no build p.m.

| Intersection             |        |        |          |        |      |      |
|--------------------------|--------|--------|----------|--------|------|------|
| Int Delay, s/veh         | 1.7    |        |          |        |      |      |
| Movement                 | EBL    | EBR    | NBL      | NBT    | SBT  | SBR  |
| Vol, veh/h               | 8      | 31     | 123      | 1857   | 1223 | 15   |
| Conflicting Peds, #/hr   | 0      | 0      | 0        | 0      | 0    | 0    |
| Sign Control             | Stop   | Stop   | Free     | Free   | Free | Free |
| RT Channelized           | -      | None   | -        | None   | -    | None |
| Storage Length           | 0      | 0      | 0        | -      | -    | 0    |
| Veh in Median Storage, # | 0      | -      | -        | 0      | 0    | -    |
| Grade, %                 | 0      | -      | -        | 0      | 0    | -    |
| Peak Hour Factor         | 80     | 80     | 96       | 96     | 96   | 96   |
| Heavy Vehicles, %        | 2      | 2      | 2        | 2      | 2    | 2    |
| Mvmt Flow                | 10     | 39     | 128      | 1934   | 1274 | 16   |
| Major/Minor              | Minor2 | Major1 |          | Major2 |      |      |
| Conflicting Flow All     | 2497   | 637    | 1274     | 0      | -    | 0    |
| Stage 1                  | 1274   | -      | -        | -      | -    | -    |
| Stage 2                  | 1223   | -      | -        | -      | -    | -    |
| Critical Hdwy            | 6.84   | 6.94   | 4.14     | -      | -    | -    |
| Critical Hdwy Stg 1      | 5.84   | -      | -        | -      | -    | -    |
| Critical Hdwy Stg 2      | 5.84   | -      | -        | -      | -    | -    |
| Follow-up Hdwy           | 3.52   | 3.32   | 2.22     | -      | -    | -    |
| Pot Cap-1 Maneuver       | 24     | 420    | 541      | -      | -    | -    |
| Stage 1                  | 226    | -      | -        | -      | -    | -    |
| Stage 2                  | 241    | -      | -        | -      | -    | -    |
| Platoon blocked, %       |        |        |          | -      | -    | -    |
| Mov Cap-1 Maneuver       | 18     | 420    | 541      | -      | -    | -    |
| Mov Cap-2 Maneuver       | 18     | -      | -        | -      | -    | -    |
| Stage 1                  | 226    | -      | -        | -      | -    | -    |
| Stage 2                  | 184    | -      | -        | -      | -    | -    |
| Approach                 | EB     | NB     |          | SB     |      |      |
| HCM Control Delay, s     | 83.2   | 0.9    |          | 0      |      |      |
| HCM LOS                  | F      |        |          |        |      |      |
| Minor Lane/Major Mvmt    | NBL    | NBT    | EBLn1    | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)         | 541    | -      | 18       | 420    | -    | -    |
| HCM Lane V/C Ratio       | 0.237  | -      | 0.556    | 0.092  | -    | -    |
| HCM Control Delay (s)    | 13.7   | -      | \$ 349.9 | 14.4   | -    | -    |
| HCM Lane LOS             | B      | -      | F        | B      | -    | -    |
| HCM 95th %tile Q(veh)    | 0.9    | -      | 1.5      | 0.3    | -    | -    |

Lanier Tract DRI  
7: GA 53 & Beechwood Boulevard

no build p.m.

| Intersection             |        |        |       |        |      |      |
|--------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh         | 0.9    |        |       |        |      |      |
| Movement                 | EBL    | EBR    | NBL   | NBT    | SBT  | SBR  |
| Vol, veh/h               | 1      | 52     | 95    | 2206   | 1532 | 10   |
| Conflicting Peds, #/hr   | 0      | 0      | 0     | 0      | 0    | 0    |
| Sign Control             | Stop   | Stop   | Free  | Free   | Free | Free |
| RT Channelized           | -      | Yield  | -     | Yield  | -    | None |
| Storage Length           | 0      | 0      | 200   | -      | -    | 360  |
| Veh in Median Storage, # | 0      | -      | -     | 0      | 0    | -    |
| Grade, %                 | 0      | -      | -     | 1      | 0    | -    |
| Peak Hour Factor         | 71     | 71     | 99    | 99     | 98   | 98   |
| Heavy Vehicles, %        | 0      | 0      | 0     | 0      | 1    | 0    |
| Mvmt Flow                | 1      | 73     | 96    | 2228   | 1563 | 10   |
| Major/Minor              | Minor2 | Major1 |       | Major2 |      |      |
| Conflicting Flow All     | 2869   | 783    | 1563  | 0      | -    | 0    |
| Stage 1                  | 1563   | -      | -     | -      | -    | -    |
| Stage 2                  | 1306   | -      | -     | -      | -    | -    |
| Critical Hdwy            | 6.8    | 6.9    | 4.1   | -      | -    | -    |
| Critical Hdwy Stg 1      | 5.8    | -      | -     | -      | -    | -    |
| Critical Hdwy Stg 2      | 5.8    | -      | -     | -      | -    | -    |
| Follow-up Hdwy           | 3.5    | 3.3    | 2.2   | -      | -    | -    |
| Pot Cap-1 Maneuver       | 14     | 341    | 428   | -      | -    | -    |
| Stage 1                  | 161    | -      | -     | -      | -    | -    |
| Stage 2                  | 221    | -      | -     | -      | -    | -    |
| Platoon blocked, %       |        |        |       | -      | -    | -    |
| Mov Cap-1 Maneuver       | 11     | 341    | 428   | -      | -    | -    |
| Mov Cap-2 Maneuver       | 11     | -      | -     | -      | -    | -    |
| Stage 1                  | 161    | -      | -     | -      | -    | -    |
| Stage 2                  | 171    | -      | -     | -      | -    | -    |
| Approach                 | EB     | NB     |       | SB     |      |      |
| HCM Control Delay, s     | 25.1   | 0.7    |       | 0      |      |      |
| HCM LOS                  | D      |        |       |        |      |      |
| Minor Lane/Major Mvmt    | NBL    | NBT    | EBLn1 | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)         | 428    | -      | 11    | 341    | -    | -    |
| HCM Lane V/C Ratio       | 0.224  | -      | 0.128 | 0.215  | -    | -    |
| HCM Control Delay (s)    | 15.8   | -      | 375.6 | 18.4   | -    | -    |
| HCM Lane LOS             | C      | -      | F     | C      | -    | -    |
| HCM 95th %tile Q(veh)    | 0.8    | -      | 0.3   | 0.8    | -    | -    |

## Lanier Tract DRI

## 5: GA 53 &amp; Lanier Valley Dr/Ahaluna Dr

no build p.m.

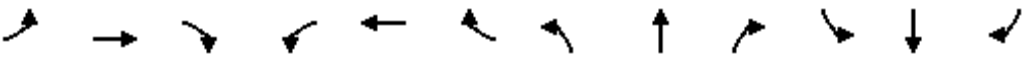
|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Volume (vph)               | 23                                                                                | 1                                                                                 | 106                                                                               | 41                                                                                | 8                                                                                 | 56                                                                                | 198                                                                                 | 1918                                                                                | 42                                                                                  | 22                                                                                  | 1326                                                                                | 3                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 2%                                                                                |                                                                                   |                                                                                   | -4%                                                                               |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 100                                                                                 |                                                                                     | 0                                                                                   | 140                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.890                                                                             |                                                                                   |                                                                                   | 0.928                                                                             |                                                                                   |                                                                                     | 0.997                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   | 0.991                                                                             |                                                                                   |                                                                                   | 0.981                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1659                                                                              | 0                                                                                 | 0                                                                                 | 1764                                                                              | 0                                                                                 | 1796                                                                                | 3581                                                                                | 0                                                                                   | 1814                                                                                | 3592                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.860                                                                             |                                                                                   |                                                                                   | 0.589                                                                             |                                                                                   | 0.143                                                                               |                                                                                     |                                                                                     | 0.080                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1440                                                                              | 0                                                                                 | 0                                                                                 | 1059                                                                              | 0                                                                                 | 270                                                                                 | 3581                                                                                | 0                                                                                   | 153                                                                                 | 3592                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 119                                                                               |                                                                                   |                                                                                   | 31                                                                                |                                                                                   |                                                                                     | 4                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 340                                                                               |                                                                                   |                                                                                   | 322                                                                               |                                                                                   |                                                                                     | 1002                                                                                |                                                                                     |                                                                                     | 1457                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.7                                                                               |                                                                                   |                                                                                   | 7.3                                                                               |                                                                                   |                                                                                     | 15.2                                                                                |                                                                                     |                                                                                     | 22.1                                                                                |                                                                                     |
| Peak Hour Factor           | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.85                                                                              | 0.85                                                                              | 0.85                                                                              | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 26                                                                                | 1                                                                                 | 119                                                                               | 48                                                                                | 9                                                                                 | 66                                                                                | 206                                                                                 | 1998                                                                                | 44                                                                                  | 23                                                                                  | 1381                                                                                | 3                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 146                                                                               | 0                                                                                 | 0                                                                                 | 123                                                                               | 0                                                                                 | 206                                                                                 | 2042                                                                                | 0                                                                                   | 23                                                                                  | 1384                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 |                                                                                     | 0                                                                                   | 336                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   |                                                                                     | 0                                                                                   | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 8                                                                                 | 8                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 10.6                                                                                | 23.0                                                                                |                                                                                     | 23.0                                                                                | 23.0                                                                                |                                                                                     |



# Lanier Tract DRI

## 5: GA 53 & Lanier Valley Dr/Ahaluna Dr

no build p.m.

|                       |  |       |     |       |       |     |       |       |     |       |       |     |
|-----------------------|------------------------------------------------------------------------------------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Lane Group            | EBL                                                                                | EBT   | EBR | WBL   | WBT   | WBR | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
| Total Split (s)       | 33.0                                                                               | 33.0  |     | 33.0  | 33.0  |     | 28.0  | 127.0 |     | 99.0  | 99.0  |     |
| Total Split (%)       | 20.6%                                                                              | 20.6% |     | 20.6% | 20.6% |     | 17.5% | 79.4% |     | 61.9% | 61.9% |     |
| Maximum Green (s)     | 26.4                                                                               | 26.4  |     | 26.4  | 26.4  |     | 22.4  | 120.9 |     | 92.9  | 92.9  |     |
| Yellow Time (s)       | 4.0                                                                                | 4.0   |     | 4.0   | 4.0   |     | 3.0   | 4.5   |     | 4.5   | 4.5   |     |
| All-Red Time (s)      | 2.6                                                                                | 2.6   |     | 2.6   | 2.6   |     | 2.6   | 1.6   |     | 1.6   | 1.6   |     |
| Lost Time Adjust (s)  |                                                                                    | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Lost Time (s)   |                                                                                    | 6.6   |     |       | 6.6   |     | 5.6   | 6.1   |     | 6.1   | 6.1   |     |
| Lead/Lag              |                                                                                    |       |     |       |       |     | Lead  |       |     | Lag   | Lag   |     |
| Lead-Lag Optimize?    |                                                                                    |       |     |       |       |     | Yes   |       |     | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0                                                                                | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode           | None                                                                               | None  |     | None  | None  |     | None  | C-Max |     | C-Max | C-Max |     |
| Act Effect Green (s)  |                                                                                    | 17.5  |     |       | 17.5  |     | 130.3 | 129.8 |     | 112.6 | 112.6 |     |
| Actuated g/C Ratio    |                                                                                    | 0.11  |     |       | 0.11  |     | 0.81  | 0.81  |     | 0.70  | 0.70  |     |
| v/c Ratio             |                                                                                    | 0.56  |     |       | 0.86  |     | 0.62  | 0.70  |     | 0.21  | 0.55  |     |
| Control Delay         |                                                                                    | 23.8  |     |       | 96.6  |     | 18.7  | 10.7  |     | 18.1  | 13.9  |     |
| Queue Delay           |                                                                                    | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay           |                                                                                    | 23.8  |     |       | 96.6  |     | 18.7  | 10.7  |     | 18.1  | 13.9  |     |
| LOS                   |                                                                                    | C     |     |       | F     |     | B     | B     |     | B     | B     |     |
| Approach Delay        |                                                                                    | 23.8  |     |       | 96.6  |     |       | 11.5  |     |       | 14.0  |     |
| Approach LOS          |                                                                                    | C     |     |       | F     |     |       | B     |     |       | B     |     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 129 (81%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 15.5

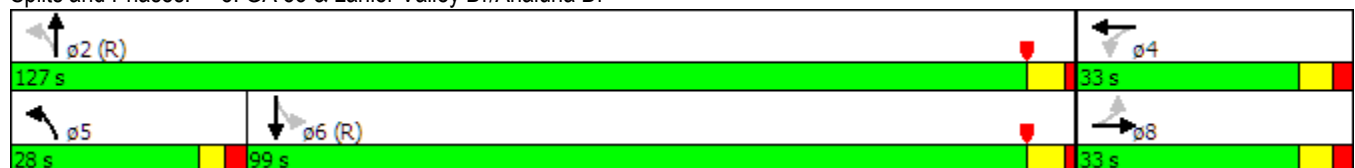
Intersection LOS: B

Intersection Capacity Utilization 86.1%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 5: GA 53 & Lanier Valley Dr/Ahaluna Dr



## Lanier Tract DRI

## 6: 53-Dawsonville Hwy &amp; Academy Sports

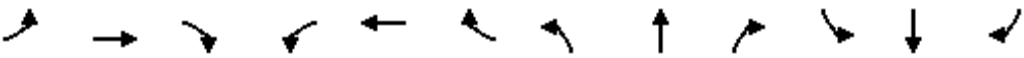
no build p.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |  |  |  |  |  |  |  |
| Volume (vph)               | 14                                                                                | 3                                                                                 | 66                                                                                | 130                                                                               | 8                                                                                 | 46                                                                                | 96                                                                                  | 1947                                                                                | 152                                                                                 | 21                                                                                  | 1324                                                                                | 30                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 4%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 70                                                                                | 200                                                                                 |                                                                                     | 170                                                                                 | 190                                                                                 |                                                                                     | 360                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1805                                                                              | 1900                                                                              | 1615                                                                              | 1769                                                                              | 1862                                                                              | 1583                                                                              | 1796                                                                                | 3592                                                                                | 1607                                                                                | 1805                                                                                | 3574                                                                                | 1615                                                                                |
| Flt Permitted              | 0.751                                                                             |                                                                                   |                                                                                   | 0.756                                                                             |                                                                                   |                                                                                   | 0.144                                                                               |                                                                                     |                                                                                     | 0.054                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1427                                                                              | 1900                                                                              | 1615                                                                              | 1408                                                                              | 1862                                                                              | 1583                                                                              | 272                                                                                 | 3592                                                                                | 1607                                                                                | 103                                                                                 | 3574                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 69                                                                                |                                                                                   |                                                                                   | 63                                                                                |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     | 64                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 262                                                                               |                                                                                   |                                                                                   | 246                                                                               |                                                                                   |                                                                                     | 1836                                                                                |                                                                                     |                                                                                     | 685                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.1                                                                               |                                                                                   |                                                                                   | 6.7                                                                               |                                                                                   |                                                                                     | 27.8                                                                                |                                                                                     |                                                                                     | 10.4                                                                                |                                                                                     |
| Peak Hour Factor           | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.80                                                                              | 0.80                                                                              | 0.80                                                                              | 0.98                                                                                | 0.98                                                                                | 0.98                                                                                | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 15                                                                                | 3                                                                                 | 69                                                                                | 162                                                                               | 10                                                                                | 58                                                                                | 98                                                                                  | 1987                                                                                | 155                                                                                 | 22                                                                                  | 1365                                                                                | 31                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 15                                                                                | 3                                                                                 | 69                                                                                | 162                                                                               | 10                                                                                | 58                                                                                | 98                                                                                  | 1987                                                                                | 155                                                                                 | 22                                                                                  | 1365                                                                                | 31                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 2                                                                                   |                                                                                     | 2                                                                                   | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 42.0                                                                              | 42.0                                                                              | 42.0                                                                              | 42.4                                                                              | 42.4                                                                              | 42.4                                                                              | 11.4                                                                                | 30.3                                                                                | 30.3                                                                                | 11.0                                                                                | 29.3                                                                                | 29.3                                                                                |

# Lanier Tract DRI

## 6: 53-Dawsonville Hwy & Academy Sports

no build p.m.

|                         |  |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 42.4                                                                               | 42.4  | 42.4  | 42.4  | 42.4  | 42.4  | 15.6  | 106.6 | 106.6 | 11.0  | 102.0 | 102.0 |
| Total Split (%)         | 26.5%                                                                              | 26.5% | 26.5% | 26.5% | 26.5% | 26.5% | 9.8%  | 66.6% | 66.6% | 6.9%  | 63.8% | 63.8% |
| Maximum Green (s)       | 36.0                                                                               | 36.0  | 36.0  | 36.0  | 36.0  | 36.0  | 9.2   | 100.4 | 100.4 | 5.0   | 95.8  | 95.8  |
| Yellow Time (s)         | 3.4                                                                                | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 4.3   | 4.3   | 3.0   | 4.3   | 4.3   |
| All-Red Time (s)        | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 1.9   | 1.9   | 3.0   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.4                                                                                | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.2   | 6.2   | 6.0   | 6.2   | 6.2   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           | 4.0                                                                                | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 23.0                                                                               | 23.0  | 23.0  | 32.0  | 32.0  | 32.0  |       | 20.0  | 20.0  |       | 19.0  | 19.0  |
| Pedestrian Calls (#/hr) | 0                                                                                  | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    | 23.7                                                                               | 23.7  | 23.7  | 23.7  | 23.7  | 23.7  | 121.3 | 116.4 | 116.4 | 115.8 | 109.6 | 109.6 |
| Actuated g/C Ratio      | 0.15                                                                               | 0.15  | 0.15  | 0.15  | 0.15  | 0.15  | 0.76  | 0.73  | 0.73  | 0.72  | 0.68  | 0.68  |
| v/c Ratio               | 0.07                                                                               | 0.01  | 0.23  | 0.78  | 0.04  | 0.20  | 0.35  | 0.76  | 0.13  | 0.16  | 0.56  | 0.03  |
| Control Delay           | 55.8                                                                               | 53.3  | 13.0  | 89.1  | 54.6  | 11.7  | 9.3   | 15.7  | 7.2   | 7.5   | 10.9  | 0.0   |
| Queue Delay             | 0.0                                                                                | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.1   | 0.0   |
| Total Delay             | 55.8                                                                               | 53.3  | 13.0  | 89.1  | 54.6  | 11.7  | 9.3   | 15.7  | 7.2   | 7.5   | 11.0  | 0.0   |
| LOS                     | E                                                                                  | D     | B     | F     | D     | B     | A     | B     | A     | A     | B     | A     |
| Approach Delay          |                                                                                    | 21.8  |       |       | 68.1  |       |       | 14.8  |       |       | 10.7  |       |
| Approach LOS            |                                                                                    | C     |       |       | E     |       |       | B     |       |       | B     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 120 (75%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 135

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 16.6

Intersection LOS: B

Intersection Capacity Utilization 87.4%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 6: 53-Dawsonville Hwy & Academy Sports

|                                                                                        |                                                                                            |  |                                                                                          |
|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------|
|  p1 |  p2 (R) |  |  p4 |
| 11 s                                                                                   | 106.6 s                                                                                    |  | 42.4 s                                                                                   |
|  p5 |  p6 (R) |  |  p8 |
| 15.6 s                                                                                 | 102 s                                                                                      |  | 42.4 s                                                                                   |

## Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 &amp; McEver Road/McEver

no build p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |                                                                                   |   |  |  |  |  |  |
| Volume (vph)               | 933                                                                               | 235                                                                               | 426                                                                               | 96                                                                                | 100                                                                               | 89                                                                                | 478                                                                                 | 1504                                                                                | 51                                                                                  | 68                                                                                  | 1136                                                                                | 531                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 1%                                                                                |                                                                                   |                                                                                   | 5%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 180                                                                               |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 310                                                                                 |                                                                                     | 185                                                                                 | 255                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 50                                                                                |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.951                                                                             | 0.850                                                                             |                                                                                   | 0.929                                                                             |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 3484                                                                              | 1708                                                                              | 1527                                                                              | 1760                                                                              | 1721                                                                              | 0                                                                                 | 3484                                                                                | 3592                                                                                | 1607                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   | 0.465                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 3484                                                                              | 1708                                                                              | 1527                                                                              | 861                                                                               | 1721                                                                              | 0                                                                                 | 3484                                                                                | 3592                                                                                | 1607                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 18                                                                                | 326                                                                               |                                                                                   | 27                                                                                |                                                                                   |                                                                                     |                                                                                     | 172                                                                                 |                                                                                     |                                                                                     | 312                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 580                                                                               |                                                                                   |                                                                                   | 331                                                                               |                                                                                   |                                                                                     | 921                                                                                 |                                                                                     |                                                                                     | 1504                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 8.8                                                                               |                                                                                   |                                                                                   | 9.0                                                                               |                                                                                   |                                                                                     | 14.0                                                                                |                                                                                     |                                                                                     | 22.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.86                                                                              | 0.86                                                                              | 0.86                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 982                                                                               | 247                                                                               | 448                                                                               | 112                                                                               | 116                                                                               | 103                                                                               | 493                                                                                 | 1551                                                                                | 53                                                                                  | 75                                                                                  | 1248                                                                                | 584                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   | 27%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 982                                                                               | 368                                                                               | 327                                                                               | 112                                                                               | 219                                                                               | 0                                                                                 | 493                                                                                 | 1551                                                                                | 53                                                                                  | 75                                                                                  | 1248                                                                                | 584                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 24                                                                                |                                                                                   |                                                                                   | 24                                                                                |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                             | NA                                                                                |                                                                                   | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 8                                                                                 |                                                                                   | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 8                                                                                 | 8                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 13.2                                                                              | 50.2                                                                              | 50.2                                                                              | 11.6                                                                              | 48.2                                                                              |                                                                                   | 13.4                                                                                | 35.6                                                                                | 35.6                                                                                | 12.9                                                                                | 44.6                                                                                | 44.6                                                                                |

# Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 & McEver Road/McEver

no build p.m.

|                         |  |       |       |      |       |     |       |       |       |      |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|------|-------|-----|-------|-------|-------|------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL  | WBT   | WBR | NBL   | NBT   | NBR   | SBL  | SBT   | SBR   |
| Total Split (s)         | 35.0                                                                               | 69.5  | 69.5  | 13.7 | 48.2  |     | 23.0  | 63.8  | 63.8  | 13.0 | 53.8  | 53.8  |
| Total Split (%)         | 21.9%                                                                              | 43.4% | 43.4% | 8.6% | 30.1% |     | 14.4% | 39.9% | 39.9% | 8.1% | 33.6% | 33.6% |
| Maximum Green (s)       | 27.7                                                                               | 62.2  | 62.2  | 7.2  | 40.9  |     | 15.5  | 57.2  | 57.2  | 5.8  | 47.2  | 47.2  |
| Yellow Time (s)         | 4.3                                                                                | 4.3   | 4.3   | 3.5  | 4.3   |     | 4.5   | 4.4   | 4.4   | 4.2  | 4.4   | 4.4   |
| All-Red Time (s)        | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 2.2   | 2.2   | 3.0  | 2.2   | 2.2   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Lost Time (s)     | 7.3                                                                                | 7.3   | 7.3   | 6.5  | 7.3   |     | 7.5   | 6.6   | 6.6   | 7.2  | 6.6   | 6.6   |
| Lead/Lag                | Lead                                                                               | Lag   | Lag   | Lead | Lag   |     | Lag   | Lag   | Lag   | Lead | Lead  | Lead  |
| Lead-Lag Optimize?      | Yes                                                                                | Yes   | Yes   | Yes  | Yes   |     | Yes   | Yes   | Yes   | Yes  | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None | None  |     | None  | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s)           |                                                                                    | 4.0   | 4.0   |      | 4.0   |     |       | 4.0   | 4.0   |      | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    | 38.0  | 38.0  |      | 36.0  |     |       | 25.0  | 25.0  |      | 34.0  | 34.0  |
| Pedestrian Calls (#/hr) |                                                                                    | 0     | 0     |      | 0     |     |       | 0     | 0     |      | 0     | 0     |
| Act Effect Green (s)    | 27.7                                                                               | 44.8  | 44.8  | 31.5 | 23.5  |     | 15.5  | 65.4  | 65.4  | 15.0 | 64.6  | 64.6  |
| Actuated g/C Ratio      | 0.17                                                                               | 0.28  | 0.28  | 0.20 | 0.15  |     | 0.10  | 0.41  | 0.41  | 0.09 | 0.40  | 0.40  |
| v/c Ratio               | 1.63                                                                               | 0.75  | 0.49  | 0.54 | 0.80  |     | 1.46  | 1.06  | 0.07  | 0.44 | 0.86  | 0.69  |
| Control Delay           | 329.5                                                                              | 59.4  | 6.5   | 47.6 | 77.6  |     | 273.4 | 95.6  | 0.1   | 69.6 | 66.1  | 38.9  |
| Queue Delay             | 0.0                                                                                | 2.9   | 0.6   | 9.2  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Delay             | 329.5                                                                              | 62.2  | 7.0   | 56.8 | 77.6  |     | 273.4 | 95.6  | 0.1   | 69.6 | 66.1  | 38.9  |
| LOS                     | F                                                                                  | E     | A     | E    | E     |     | F     | F     | A     | E    | E     | D     |
| Approach Delay          |                                                                                    | 208.0 |       |      | 70.6  |     |       | 135.0 |       |      | 57.9  |       |
| Approach LOS            |                                                                                    | F     |       |      | E     |     |       | F     |       |      | E     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 52 (33%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.63

Intersection Signal Delay: 127.3

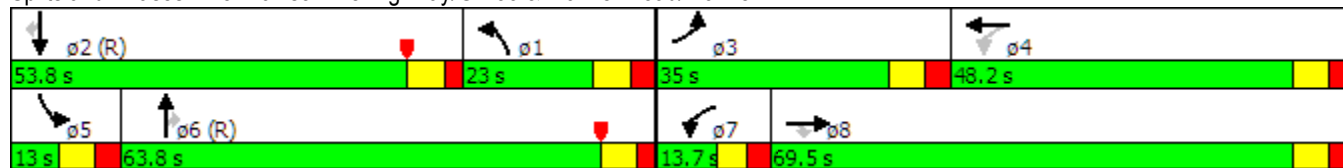
Intersection LOS: F

Intersection Capacity Utilization 106.7%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 8: Dawsonville Highway/GA 53 & McEver Road/McEver



## Lanier Tract DRI

## 9: Dawsonville Highway &amp; Greenhill Circle/Greenhill Circle

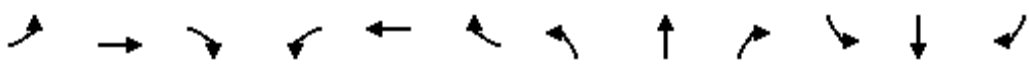
no build p.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 146                                                                               | 10                                                                                | 152                                                                               | 66                                                                                | 22                                                                                | 42                                                                                | 274                                                                                 | 1931                                                                                | 77                                                                                  | 44                                                                                  | 1537                                                                                | 59                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 3%                                                                                |                                                                                   |                                                                                   | 7%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 190                                                                                 |                                                                                     | 190                                                                                 | 185                                                                                 |                                                                                     | 100                                                                                 |
| Storage Lanes              | 0                                                                                 |                                                                                   | 1                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              |                                                                                   | 0.955                                                                             |                                                                                   |                                                                                   | 0.964                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1787                                                                              | 1591                                                                              | 0                                                                                 | 1767                                                                              | 1558                                                                              | 1796                                                                                | 3592                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   | 0.591                                                                             |                                                                                   |                                                                                   | 0.482                                                                             |                                                                                   | 0.054                                                                               |                                                                                     |                                                                                     | 0.055                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1106                                                                              | 1591                                                                              | 0                                                                                 | 884                                                                               | 1558                                                                              | 102                                                                                 | 3592                                                                                | 1607                                                                                | 104                                                                                 | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 167                                                                               |                                                                                   |                                                                                   | 95                                                                                |                                                                                     |                                                                                     | 54                                                                                  |                                                                                     |                                                                                     | 95                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 288                                                                               |                                                                                   |                                                                                   | 254                                                                               |                                                                                   |                                                                                     | 778                                                                                 |                                                                                     |                                                                                     | 921                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.9                                                                               |                                                                                   |                                                                                   | 6.9                                                                               |                                                                                   |                                                                                     | 11.8                                                                                |                                                                                     |                                                                                     | 14.0                                                                                |                                                                                     |
| Peak Hour Factor           | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.78                                                                              | 0.78                                                                              | 0.78                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 160                                                                               | 11                                                                                | 167                                                                               | 85                                                                                | 28                                                                                | 54                                                                                | 282                                                                                 | 1991                                                                                | 79                                                                                  | 46                                                                                  | 1618                                                                                | 62                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 171                                                                               | 167                                                                               | 0                                                                                 | 113                                                                               | 54                                                                                | 282                                                                                 | 1991                                                                                | 79                                                                                  | 46                                                                                  | 1618                                                                                | 62                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.02                                                                              | 1.02                                                                              | 1.02                                                                              | 1.05                                                                              | 1.05                                                                              | 1.05                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              | 23.0                                                                              | 39.9                                                                              | 39.9                                                                              | 39.9                                                                              | 11.0                                                                                | 28.0                                                                                | 28.0                                                                                | 10.0                                                                                | 36.0                                                                                | 36.0                                                                                |

# Lanier Tract DRI

## 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle

no build p.m.

|                         |  |       |       |       |       |       |       |       |       |      |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL  | SBT   | SBR   |
| Total Split (s)         | 39.9                                                                               | 39.9  | 39.9  | 39.9  | 39.9  | 39.9  | 32.0  | 110.1 | 110.1 | 10.0 | 88.1  | 88.1  |
| Total Split (%)         | 24.9%                                                                              | 24.9% | 24.9% | 24.9% | 24.9% | 24.9% | 20.0% | 68.8% | 68.8% | 6.3% | 55.1% | 55.1% |
| Maximum Green (s)       | 34.0                                                                               | 34.0  | 34.0  | 34.0  | 34.0  | 34.0  | 26.0  | 104.1 | 104.1 | 5.0  | 82.1  | 82.1  |
| Yellow Time (s)         | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 4.4   | 4.4   | 3.5  | 4.4   | 4.4   |
| All-Red Time (s)        | 2.9                                                                                | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 3.0   | 1.6   | 1.6   | 1.5  | 1.6   | 1.6   |
| Lost Time Adjust (s)    |                                                                                    | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Lost Time (s)     |                                                                                    | 5.9   | 5.9   |       | 5.9   | 5.9   | 6.0   | 6.0   | 6.0   | 5.0  | 6.0   | 6.0   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes  | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s)           |                                                                                    |       |       | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |      | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    |       |       | 30.0  | 30.0  | 30.0  |       | 18.0  | 18.0  |      | 26.0  | 26.0  |
| Pedestrian Calls (#/hr) |                                                                                    |       |       | 0     | 0     | 0     |       | 0     | 0     |      | 0     | 0     |
| Act Effect Green (s)    |                                                                                    | 28.1  | 28.1  |       | 28.1  | 28.1  | 120.0 | 111.5 | 111.5 | 96.9 | 90.2  | 90.2  |
| Actuated g/C Ratio      |                                                                                    | 0.18  | 0.18  |       | 0.18  | 0.18  | 0.75  | 0.70  | 0.70  | 0.61 | 0.56  | 0.56  |
| v/c Ratio               |                                                                                    | 0.88  | 0.40  |       | 0.73  | 0.15  | 0.86  | 0.80  | 0.07  | 0.38 | 0.80  | 0.07  |
| Control Delay           |                                                                                    | 103.0 | 9.8   |       | 87.7  | 1.7   | 49.2  | 28.9  | 5.5   | 21.7 | 55.9  | 11.8  |
| Queue Delay             |                                                                                    | 0.0   | 2.3   |       | 78.3  | 0.0   | 0.0   | 47.3  | 0.0   | 0.0  | 1.0   | 0.0   |
| Total Delay             |                                                                                    | 103.0 | 12.1  |       | 166.0 | 1.7   | 49.2  | 76.2  | 5.5   | 21.7 | 56.9  | 11.8  |
| LOS                     |                                                                                    | F     | B     |       | F     | A     | D     | E     | A     | C    | E     | B     |
| Approach Delay          |                                                                                    | 58.1  |       |       | 112.9 |       |       | 70.6  |       |      | 54.3  |       |
| Approach LOS            |                                                                                    | E     |       |       | F     |       |       | E     |       |      | D     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 65.1

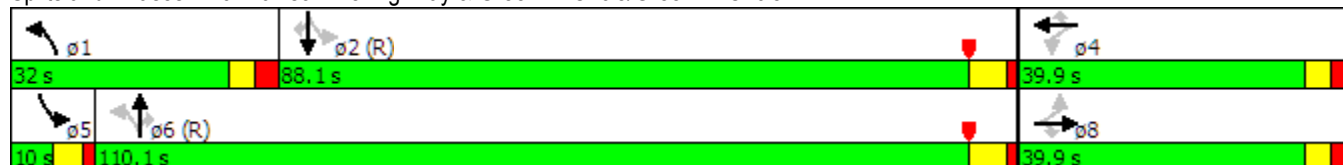
Intersection LOS: E

Intersection Capacity Utilization 87.9%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle



## Lanier Tract DRI

## 10: Dawsonville Highway &amp; Shallowford Rd/Best Buy

no build p.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 572                                                                               | 42                                                                                | 29                                                                                | 40                                                                                | 30                                                                                | 8                                                                                 | 44                                                                                  | 1810                                                                                | 126                                                                                 | 8                                                                                   | 1282                                                                                | 511                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | -1%                                                                               |                                                                                   |                                                                                   | 10%                                                                               |                                                                                   |                                                                                     | -4%                                                                                 |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 350                                                                               |                                                                                   | 350                                                                               | 0                                                                                 |                                                                                   | 0                                                                                 | 350                                                                                 |                                                                                     | 150                                                                                 | 265                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 100                                                                               |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             | 0.959                                                                             |                                                                                   |                                                                                   | 0.972                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1723                                                                              | 1740                                                                              | 1623                                                                              | 0                                                                                 | 1754                                                                              | 1534                                                                              | 1841                                                                                | 3682                                                                                | 1647                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             | 0.959                                                                             |                                                                                   |                                                                                   | 0.972                                                                             |                                                                                   | 0.085                                                                               |                                                                                     |                                                                                     | 0.046                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1723                                                                              | 1740                                                                              | 1623                                                                              | 0                                                                                 | 1754                                                                              | 1534                                                                              | 165                                                                                 | 3682                                                                                | 1647                                                                                | 88                                                                                  | 3628                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 106                                                                               |                                                                                   |                                                                                   | 111                                                                               |                                                                                     |                                                                                     | 65                                                                                  |                                                                                     |                                                                                     | 321                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 653                                                                               |                                                                                   |                                                                                   | 178                                                                               |                                                                                   |                                                                                     | 1046                                                                                |                                                                                     |                                                                                     | 778                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 9.9                                                                               |                                                                                   |                                                                                   | 4.9                                                                               |                                                                                   |                                                                                     | 15.8                                                                                |                                                                                     |                                                                                     | 11.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.94                                                                                | 0.94                                                                                | 0.94                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 636                                                                               | 47                                                                                | 32                                                                                | 45                                                                                | 34                                                                                | 9                                                                                 | 47                                                                                  | 1926                                                                                | 134                                                                                 | 9                                                                                   | 1409                                                                                | 562                                                                                 |
| Shared Lane Traffic (%)    | 46%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 343                                                                               | 340                                                                               | 32                                                                                | 0                                                                                 | 79                                                                                | 9                                                                                 | 47                                                                                  | 1926                                                                                | 134                                                                                 | 9                                                                                   | 1409                                                                                | 562                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 0.99                                                                              | 0.99                                                                              | 0.99                                                                              | 1.07                                                                              | 1.07                                                                              | 1.07                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Split                                                                             | NA                                                                                | Perm                                                                              | Split                                                                             | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | Perm                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 3                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 3                                                                                 | 3                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 36.7                                                                              | 36.7                                                                              | 36.7                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                                | 28.8                                                                                | 28.8                                                                                | 30.8                                                                                | 30.8                                                                                | 30.8                                                                                |



# Lanier Tract DRI

## 10: Dawsonville Highway & Shallowford Rd/Best Buy

no build p.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Total Split (s)         | 36.8                                                                              | 36.8                                                                              | 36.8                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                               | 84.3                                                                                | 84.3                                                                                | 73.5                                                                                | 73.5                                                                                | 73.5                                                                                |
| Total Split (%)         | 23.0%                                                                             | 23.0%                                                                             | 23.0%                                                                             | 24.3%                                                                             | 24.3%                                                                             | 24.3%                                                                             | 6.8%                                                                               | 52.7%                                                                               | 52.7%                                                                               | 45.9%                                                                               | 45.9%                                                                               | 45.9%                                                                               |
| Maximum Green (s)       | 30.1                                                                              | 30.1                                                                              | 30.1                                                                              | 33.0                                                                              | 33.0                                                                              | 33.0                                                                              | 5.0                                                                                | 77.5                                                                                | 77.5                                                                                | 66.7                                                                                | 66.7                                                                                | 66.7                                                                                |
| Yellow Time (s)         | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 4.9                                                                                 | 4.9                                                                                 | 4.9                                                                                 | 4.9                                                                                 | 4.9                                                                                 |
| All-Red Time (s)        | 2.2                                                                               | 2.2                                                                               | 2.2                                                                               | 2.9                                                                               | 2.9                                                                               | 2.9                                                                               | 2.8                                                                                | 1.9                                                                                 | 1.9                                                                                 | 1.9                                                                                 | 1.9                                                                                 | 1.9                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.7                                                                               | 6.7                                                                               | 6.7                                                                               |                                                                                   | 5.9                                                                               | 5.9                                                                               | 5.8                                                                                | 6.8                                                                                 | 6.8                                                                                 | 6.8                                                                                 | 6.8                                                                                 | 6.8                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lag                                                                               | Lead                                                                               |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 | Lag                                                                                 |
| Lead-Lag Optimize?      | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                                |                                                                                     |                                                                                     | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                               | C-Min                                                                               | C-Min                                                                               | C-Min                                                                               | C-Min                                                                               | C-Min                                                                               |
| Walk Time (s)           | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                    | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |
| Flash Dont Walk (s)     | 26.0                                                                              | 26.0                                                                              | 26.0                                                                              | 29.0                                                                              | 29.0                                                                              | 29.0                                                                              |                                                                                    | 18.0                                                                                | 18.0                                                                                | 20.0                                                                                | 20.0                                                                                | 20.0                                                                                |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Act Effect Green (s)    | 30.1                                                                              | 30.1                                                                              | 30.1                                                                              |                                                                                   | 12.6                                                                              | 12.6                                                                              | 98.9                                                                               | 97.9                                                                                | 97.9                                                                                | 87.3                                                                                | 87.3                                                                                | 87.3                                                                                |
| Actuated g/C Ratio      | 0.19                                                                              | 0.19                                                                              | 0.19                                                                              |                                                                                   | 0.08                                                                              | 0.08                                                                              | 0.62                                                                               | 0.61                                                                                | 0.61                                                                                | 0.55                                                                                | 0.55                                                                                | 0.55                                                                                |
| v/c Ratio               | 1.06                                                                              | 1.04                                                                              | 0.08                                                                              |                                                                                   | 0.57                                                                              | 0.04                                                                              | 0.27                                                                               | 0.86                                                                                | 0.13                                                                                | 0.19                                                                                | 0.71                                                                                | 0.55                                                                                |
| Control Delay           | 126.3                                                                             | 121.6                                                                             | 0.4                                                                               |                                                                                   | 86.5                                                                              | 0.4                                                                               | 16.6                                                                               | 30.7                                                                                | 7.4                                                                                 | 58.2                                                                                | 54.5                                                                                | 33.0                                                                                |
| Queue Delay             | 1.1                                                                               | 1.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 47.1                                                                                | 0.0                                                                                 | 0.0                                                                                 | 12.5                                                                                | 0.7                                                                                 |
| Total Delay             | 127.5                                                                             | 122.6                                                                             | 0.4                                                                               |                                                                                   | 86.5                                                                              | 0.4                                                                               | 16.6                                                                               | 77.8                                                                                | 7.4                                                                                 | 58.2                                                                                | 66.9                                                                                | 33.7                                                                                |
| LOS                     | F                                                                                 | F                                                                                 | A                                                                                 |                                                                                   | F                                                                                 | A                                                                                 | B                                                                                  | E                                                                                   | A                                                                                   | E                                                                                   | E                                                                                   | C                                                                                   |
| Approach Delay          |                                                                                   | 119.5                                                                             |                                                                                   |                                                                                   | 77.7                                                                              |                                                                                   |                                                                                    | 72.0                                                                                |                                                                                     |                                                                                     | 57.5                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | F                                                                                 |                                                                                   |                                                                                   | E                                                                                 |                                                                                   |                                                                                    | E                                                                                   |                                                                                     |                                                                                     | E                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 91 (57%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.06

Intersection Signal Delay: 73.1

Intersection LOS: E

Intersection Capacity Utilization 87.3%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 10: Dawsonville Highway & Shallowford Rd/Best Buy

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |  |  |  |  |  |
| 10.8 s                                                                              | 73.5 s                                                                              |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 36.8 s                                                                              |                                                                                     |                                                                                     | 38.9 s                                                                               |                                                                                       |                                                                                       |
|  |  |  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
| 84.3 s                                                                              |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |

## Appendix E

### Future Phase One Intersection Analysis

Lanier Tract DRI  
1: Sportsman Club Road & Strickland Drive

phase one a.m.

| Intersection             |        |       |        |      |        |           |
|--------------------------|--------|-------|--------|------|--------|-----------|
| Int Delay, s/veh         | 4.2    |       |        |      |        |           |
|                          |        |       |        |      |        |           |
| Movement                 | WBL    | WBR   |        | NBT  | NBR    | SBL SBT   |
| Vol, veh/h               | 30     | 0     |        | 7    | 11     | 0 25      |
| Conflicting Peds, #/hr   | 0      | 0     |        | 0    | 0      | 0 0       |
| Sign Control             | Stop   | Stop  |        | Free | Free   | Free Free |
| RT Channelized           | -      | None  |        | -    | None   | - None    |
| Storage Length           | 0      | -     |        | -    | -      | - -       |
| Veh in Median Storage, # | 0      | -     |        | 0    | -      | - 0       |
| Grade, %                 | 0      | -     |        | 0    | -      | - 0       |
| Peak Hour Factor         | 50     | 50    |        | 58   | 58     | 64 64     |
| Heavy Vehicles, %        | 2      | 2     |        | 2    | 2      | 2 2       |
| Mvmt Flow                | 60     | 0     |        | 12   | 19     | 0 39      |
|                          |        |       |        |      |        |           |
| Major/Minor              | Minor1 |       | Major1 |      | Major2 |           |
| Conflicting Flow All     | 61     | 22    | 0      | 0    | 31     | 0         |
| Stage 1                  | 22     | -     | -      | -    | -      | -         |
| Stage 2                  | 39     | -     | -      | -    | -      | -         |
| Critical Hdwy            | 6.42   | 6.22  | -      | -    | 4.12   | -         |
| Critical Hdwy Stg 1      | 5.42   | -     | -      | -    | -      | -         |
| Critical Hdwy Stg 2      | 5.42   | -     | -      | -    | -      | -         |
| Follow-up Hdwy           | 3.518  | 3.318 | -      | -    | 2.218  | -         |
| Pot Cap-1 Maneuver       | 945    | 1055  | -      | -    | 1582   | -         |
| Stage 1                  | 1001   | -     | -      | -    | -      | -         |
| Stage 2                  | 983    | -     | -      | -    | -      | -         |
| Platoon blocked, %       |        |       | -      | -    |        | -         |
| Mov Cap-1 Maneuver       | 945    | 1055  | -      | -    | 1582   | -         |
| Mov Cap-2 Maneuver       | 945    | -     | -      | -    | -      | -         |
| Stage 1                  | 1001   | -     | -      | -    | -      | -         |
| Stage 2                  | 983    | -     | -      | -    | -      | -         |
|                          |        |       |        |      |        |           |
| Approach                 | WB     |       | NB     |      | SB     |           |
| HCM Control Delay, s     | 9.1    |       | 0      |      | 0      |           |
| HCM LOS                  | A      |       |        |      |        |           |
|                          |        |       |        |      |        |           |
| Minor Lane/Major Mvmt    | NBT    | NBR   | WBLn1  | SBL  | SBT    |           |
| Capacity (veh/h)         | -      | -     | 945    | 1582 | -      |           |
| HCM Lane V/C Ratio       | -      | -     | 0.063  | -    | -      |           |
| HCM Control Delay (s)    | -      | -     | 9.1    | 0    | -      |           |
| HCM Lane LOS             | -      | -     | A      | A    | -      |           |
| HCM 95th %tile Q(veh)    | -      | -     | 0.2    | 0    | -      |           |

Lanier Tract DRI  
2: GA 53 & Sportsman Club Road

phase one a.m.

| Intersection               |        |                        |      |                            |       |      |                                |          |      |          |      |      |
|----------------------------|--------|------------------------|------|----------------------------|-------|------|--------------------------------|----------|------|----------|------|------|
| Int Delay, s/veh           |        | 23                     |      |                            |       |      |                                |          |      |          |      |      |
|                            |        |                        |      |                            |       |      |                                |          |      |          |      |      |
| Movement                   | EBL    | EBT                    | EBR  | WBL                        | WBT   | WBR  | NBL                            | NBT      | NBR  | SBL      | SBT  | SBR  |
| Vol, veh/h                 | 14     | 1885                   | 0    | 5                          | 841   | 15   | 0                              | 0        | 0    | 41       | 0    | 23   |
| Conflicting Peds, #/hr     | 0      | 0                      | 0    | 0                          | 0     | 0    | 0                              | 0        | 0    | 0        | 0    | 0    |
| Sign Control               | Free   | Free                   | Free | Free                       | Free  | Free | Stop                           | Stop     | Stop | Stop     | Stop | Stop |
| RT Channelized             | -      | -                      | None | -                          | -     | None | -                              | -        | None | -        | -    | None |
| Storage Length             | 0      | -                      | -    | 0                          | -     | -    | -                              | -        | -    | -        | -    | -    |
| Veh in Median Storage, #   | -      | 0                      | -    | -                          | 0     | -    | -                              | 0        | -    | -        | 0    | -    |
| Grade, %                   | -      | 0                      | -    | -                          | 0     | -    | -                              | 0        | -    | -        | 0    | -    |
| Peak Hour Factor           | 86     | 86                     | 86   | 84                         | 84    | 84   | 92                             | 92       | 92   | 70       | 70   | 70   |
| Heavy Vehicles, %          | 2      | 2                      | 2    | 2                          | 2     | 2    | 2                              | 2        | 2    | 2        | 2    | 2    |
| Mvmt Flow                  | 16     | 2192                   | 0    | 6                          | 1001  | 18   | 0                              | 0        | 0    | 59       | 0    | 33   |
|                            |        |                        |      |                            |       |      |                                |          |      |          |      |      |
| Major/Minor                | Major1 |                        |      | Major2                     |       |      | Minor1                         |          |      | Minor2   |      |      |
| Conflicting Flow All       | 1019   | 0                      | 0    | 2192                       | 0     | 0    | 2737                           | 3255     | 1096 | 2150     | 3246 | 510  |
| Stage 1                    | -      | -                      | -    | -                          | -     | -    | 2224                           | 2224     | -    | 1022     | 1022 | -    |
| Stage 2                    | -      | -                      | -    | -                          | -     | -    | 513                            | 1031     | -    | 1128     | 2224 | -    |
| Critical Hdwy              | 4.14   | -                      | -    | 4.14                       | -     | -    | 7.54                           | 6.54     | 6.94 | 7.54     | 6.54 | 6.94 |
| Critical Hdwy Stg 1        | -      | -                      | -    | -                          | -     | -    | 6.54                           | 5.54     | -    | 6.54     | 5.54 | -    |
| Critical Hdwy Stg 2        | -      | -                      | -    | -                          | -     | -    | 6.54                           | 5.54     | -    | 6.54     | 5.54 | -    |
| Follow-up Hdwy             | 2.22   | -                      | -    | 2.22                       | -     | -    | 3.52                           | 4.02     | 3.32 | 3.52     | 4.02 | 3.32 |
| Pot Cap-1 Maneuver         | 677    | -                      | -    | 238                        | -     | -    | 10                             | 9        | 208  | ~ 27     | 9    | 509  |
| Stage 1                    | -      | -                      | -    | -                          | -     | -    | 44                             | 79       | -    | 253      | 312  | -    |
| Stage 2                    | -      | -                      | -    | -                          | -     | -    | 512                            | 309      | -    | 218      | 79   | -    |
| Platoon blocked, %         |        | -                      | -    |                            | -     | -    |                                |          |      |          |      |      |
| Mov Cap-1 Maneuver         | 677    | -                      | -    | 238                        | -     | -    | 9                              | 9        | 208  | ~ 26     | 9    | 509  |
| Mov Cap-2 Maneuver         | -      | -                      | -    | -                          | -     | -    | 9                              | 9        | -    | ~ 26     | 9    | -    |
| Stage 1                    | -      | -                      | -    | -                          | -     | -    | 43                             | 77       | -    | 247      | 304  | -    |
| Stage 2                    | -      | -                      | -    | -                          | -     | -    | 467                            | 301      | -    | 213      | 77   | -    |
|                            |        |                        |      |                            |       |      |                                |          |      |          |      |      |
| Approach                   | EB     |                        |      | WB                         |       |      | NB                             |          |      | SB       |      |      |
| HCM Control Delay, s       | 0.1    |                        |      | 0.1                        |       |      | 0                              |          |      | \$ 834.4 |      |      |
| HCM LOS                    |        |                        |      |                            |       |      | A                              |          |      | F        |      |      |
|                            |        |                        |      |                            |       |      |                                |          |      |          |      |      |
| Minor Lane/Major Mvmt      | NBLn1  | EBL                    | EBT  | EBR                        | WBL   | WBT  | WBR                            | SBLn1    |      |          |      |      |
| Capacity (veh/h)           | -      | 677                    | -    | -                          | 238   | -    | -                              | 39       |      |          |      |      |
| HCM Lane V/C Ratio         | -      | 0.024                  | -    | -                          | 0.025 | -    | -                              | 2.344    |      |          |      |      |
| HCM Control Delay (s)      | 0      | 10.4                   | -    | -                          | 20.5  | -    | -                              | \$ 834.4 |      |          |      |      |
| HCM Lane LOS               | A      | B                      | -    | -                          | C     | -    | -                              | F        |      |          |      |      |
| HCM 95th %tile Q(veh)      | -      | 0.1                    | -    | -                          | 0.1   | -    | -                              | 10       |      |          |      |      |
| Notes                      |        |                        |      |                            |       |      |                                |          |      |          |      |      |
| ~: Volume exceeds capacity |        | \$: Delay exceeds 300s |      | +: Computation Not Defined |       |      | *: All major volume in platoon |          |      |          |      |      |

Lanier Tract DRI  
3: GA 53 & Avonlea Way

phase one a.m.

| Intersection                                                                                                         |        |      |      |        |       |       |        |       |      |        |      |      |
|----------------------------------------------------------------------------------------------------------------------|--------|------|------|--------|-------|-------|--------|-------|------|--------|------|------|
| Int Delay, s/veh                                                                                                     | 9.8    |      |      |        |       |       |        |       |      |        |      |      |
|                                                                                                                      |        |      |      |        |       |       |        |       |      |        |      |      |
| Movement                                                                                                             | EBL    | EBT  | EBR  | WBL    | WBT   | WBR   | NBL    | NBT   | NBR  | SBL    | SBT  | SBR  |
| Vol, veh/h                                                                                                           | 17     | 0    | 79   | 2      | 0     | 13    | 13     | 866   | 2    | 15     | 1867 | 7    |
| Conflicting Peds, #/hr                                                                                               | 0      | 0    | 0    | 0      | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0    |
| Sign Control                                                                                                         | Stop   | Stop | Stop | Stop   | Stop  | Stop  | Free   | Free  | Free | Free   | Free | Free |
| RT Channelized                                                                                                       | -      | -    | None | -      | -     | None  | -      | -     | None | -      | -    | None |
| Storage Length                                                                                                       | 0      | -    | 0    | 0      | -     | 0     | 0      | -     | -    | 0      | -    | 0    |
| Veh in Median Storage, #                                                                                             | -      | 0    | -    | -      | 0     | -     | -      | 0     | -    | -      | 0    | -    |
| Grade, %                                                                                                             | -      | 0    | -    | -      | 0     | -     | -      | 0     | -    | -      | 0    | -    |
| Peak Hour Factor                                                                                                     | 84     | 84   | 84   | 80     | 80    | 80    | 88     | 88    | 88   | 86     | 86   | 86   |
| Heavy Vehicles, %                                                                                                    | 2      | 2    | 2    | 2      | 2     | 2     | 2      | 2     | 2    | 2      | 2    | 2    |
| Mvmt Flow                                                                                                            | 20     | 0    | 94   | 2      | 0     | 16    | 15     | 984   | 2    | 17     | 2171 | 8    |
|                                                                                                                      |        |      |      |        |       |       |        |       |      |        |      |      |
| Major/Minor                                                                                                          | Minor2 |      |      | Minor1 |       |       | Major1 |       |      | Major2 |      |      |
| Conflicting Flow All                                                                                                 | 2728   | 3222 | 1085 | 2135   | 3221  | 493   | 2171   | 0     | 0    | 986    | 0    | 0    |
| Stage 1                                                                                                              | 2206   | 2206 | -    | 1015   | 1015  | -     | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 522    | 1016 | -    | 1120   | 2206  | -     | -      | -     | -    | -      | -    | -    |
| Critical Hdwy                                                                                                        | 7.54   | 6.54 | 6.94 | 7.54   | 6.54  | 6.94  | 4.14   | -     | -    | 4.14   | -    | -    |
| Critical Hdwy Stg 1                                                                                                  | 6.54   | 5.54 | -    | 6.54   | 5.54  | -     | -      | -     | -    | -      | -    | -    |
| Critical Hdwy Stg 2                                                                                                  | 6.54   | 5.54 | -    | 6.54   | 5.54  | -     | -      | -     | -    | -      | -    | -    |
| Follow-up Hdwy                                                                                                       | 3.52   | 4.02 | 3.32 | 3.52   | 4.02  | 3.32  | 2.22   | -     | -    | 2.22   | -    | -    |
| Pot Cap-1 Maneuver                                                                                                   | ~ 10   | 10   | 212  | 28     | 10    | 522   | 242    | -     | -    | 696    | -    | -    |
| Stage 1                                                                                                              | 45     | 81   | -    | 255    | 314   | -     | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 506    | 314  | -    | 220    | 81    | -     | -      | -     | -    | -      | -    | -    |
| Platoon blocked, %                                                                                                   |        |      |      |        |       |       |        | -     | -    |        | -    | -    |
| Mov Cap-1 Maneuver                                                                                                   | ~ 9    | 9    | 212  | 15     | 9     | 522   | 242    | -     | -    | 696    | -    | -    |
| Mov Cap-2 Maneuver                                                                                                   | ~ 9    | 9    | -    | 15     | 9     | -     | -      | -     | -    | -      | -    | -    |
| Stage 1                                                                                                              | 42     | 79   | -    | 239    | 295   | -     | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 460    | 295  | -    | 119    | 79    | -     | -      | -     | -    | -      | -    | -    |
|                                                                                                                      |        |      |      |        |       |       |        |       |      |        |      |      |
| Approach                                                                                                             | EB     |      |      | WB     |       |       | NB     |       |      | SB     |      |      |
| HCM Control Delay, s                                                                                                 | 273.3  |      |      | 48.9   |       |       | 0.3    |       |      | 0.1    |      |      |
| HCM LOS                                                                                                              | F      |      |      | E      |       |       |        |       |      |        |      |      |
|                                                                                                                      |        |      |      |        |       |       |        |       |      |        |      |      |
| Minor Lane/Major Mvmt                                                                                                | NBL    | NBT  | NBR  | EBLn1  | EBLn2 | WBLn1 | WBLn2  | SBL   | SBT  | SBR    |      |      |
| Capacity (veh/h)                                                                                                     | 242    | -    | -    | 9      | 212   | 15    | 522    | 696   | -    | -      |      |      |
| HCM Lane V/C Ratio                                                                                                   | 0.061  | -    | -    | 2.249  | 0.444 | 0.167 | 0.031  | 0.025 | -    | -      |      |      |
| HCM Control Delay (s)                                                                                                | 20.8   | -    | \$   | 1381.4 | 34.9  | 288.1 | 12.1   | 10.3  | -    | -      |      |      |
| HCM Lane LOS                                                                                                         | C      | -    | -    | F      | D     | F     | B      | B     | -    | -      |      |      |
| HCM 95th %tile Q(veh)                                                                                                | 0.2    | -    | -    | 3.5    | 2.1   | 0.5   | 0.1    | 0.1   | -    | -      |      |      |
| Notes                                                                                                                |        |      |      |        |       |       |        |       |      |        |      |      |
| ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |        |      |      |        |       |       |        |       |      |        |      |      |

Lanier Tract DRI  
4: GA 53 & Canterbury Road

phase one a.m.

| Intersection     |      |  |  |  |  |  |  |  |  |  |  |  |
|------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Int Delay, s/veh | 12.4 |  |  |  |  |  |  |  |  |  |  |  |

| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol, veh/h               | 20   | 0    | 105  | 3    | 0    | 2    | 25   | 826  | 3    | 2    | 1994 | 8    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | 0    | -    | 0    | 0    | -    | 0    | 0    | -    | -    | 0    | -    | 0    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 88   | 92   | 88   | 92   | 92   | 92   | 86   | 86   | 92   | 92   | 91   | 91   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 23   | 0    | 119  | 3    | 0    | 2    | 29   | 960  | 3    | 2    | 2191 | 9    |

| Major/Minor          | Minor2 |      |      | Minor1 |      |      | Major1 |   |   | Major2 |   |   |
|----------------------|--------|------|------|--------|------|------|--------|---|---|--------|---|---|
| Conflicting Flow All | 2734   | 3218 | 1096 | 2120   | 3216 | 482  | 2191   | 0 | 0 | 964    | 0 | 0 |
| Stage 1              | 2196   | 2196 | -    | 1020   | 1020 | -    | -      | - | - | -      | - | - |
| Stage 2              | 538    | 1022 | -    | 1100   | 2196 | -    | -      | - | - | -      | - | - |
| Critical Hdwy        | 7.54   | 6.54 | 6.94 | 7.54   | 6.54 | 6.94 | 4.14   | - | - | 4.14   | - | - |
| Critical Hdwy Stg 1  | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    | -      | - | - | -      | - | - |
| Critical Hdwy Stg 2  | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    | -      | - | - | -      | - | - |
| Follow-up Hdwy       | 3.52   | 4.02 | 3.32 | 3.52   | 4.02 | 3.32 | 2.22   | - | - | 2.22   | - | - |
| Pot Cap-1 Maneuver   | ~ 10   | 10   | 208  | 29     | 10   | 530  | 238    | - | - | 710    | - | - |
| Stage 1              | 46     | 82   | -    | 253    | 312  | -    | -      | - | - | -      | - | - |
| Stage 2              | 495    | 312  | -    | 226    | 82   | -    | -      | - | - | -      | - | - |
| Platoon blocked, %   |        |      |      |        |      |      | -      | - |   |        | - | - |
| Mov Cap-1 Maneuver   | ~ 9    | 9    | 208  | 11     | 9    | 530  | 238    | - | - | 710    | - | - |
| Mov Cap-2 Maneuver   | ~ 9    | 9    | -    | 11     | 9    | -    | -      | - | - | -      | - | - |
| Stage 1              | 40     | 82   | -    | 222    | 274  | -    | -      | - | - | -      | - | - |
| Stage 2              | 433    | 274  | -    | 96     | 82   | -    | -      | - | - | -      | - | - |

| Approach             | EB    | WB    | NB  | SB |
|----------------------|-------|-------|-----|----|
| HCM Control Delay, s | 277.1 | 266.4 | 0.7 | 0  |
| HCM LOS              | F     | F     |     |    |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1     | EBLn2 | WBLn1    | WBLn2 | SBL   | SBT | SBR |
|-----------------------|-------|-----|-----|-----------|-------|----------|-------|-------|-----|-----|
| Capacity (veh/h)      | 238   | -   | -   | 9         | 208   | 11       | 530   | 710   | -   | -   |
| HCM Lane V/C Ratio    | 0.122 | -   | -   | 2.525     | 0.574 | 0.296    | 0.004 | 0.003 | -   | -   |
| HCM Control Delay (s) | 22.2  | -   | -   | \$ 1504.7 | 43.3  | \$ 436.1 | 11.8  | 10.1  | -   | -   |
| HCM Lane LOS          | C     | -   | -   | F         | E     | F        | B     | B     | -   | -   |
| HCM 95th %tile Q(veh) | 0.4   | -   | -   | 3.9       | 3.1   | 0.7      | 0     | 0     | -   | -   |

| Notes                      |                        |                            |                                |  |  |  |  |  |  |  |
|----------------------------|------------------------|----------------------------|--------------------------------|--|--|--|--|--|--|--|
| ~: Volume exceeds capacity | \$: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |  |  |  |  |  |  |  |

Intersection

Int Delay, s/veh 3.3

| Movement                 | EBL  | EBR   | NBL  | NBT   | SBT  | SBR  |
|--------------------------|------|-------|------|-------|------|------|
| Vol, veh/h               | 6    | 45    | 30   | 930   | 2288 | 2    |
| Conflicting Peds, #/hr   | 0    | 0     | 0    | 0     | 0    | 0    |
| Sign Control             | Stop | Stop  | Free | Free  | Free | Free |
| RT Channelized           | -    | Yield | -    | Yield | -    | None |
| Storage Length           | 0    | 0     | 200  | -     | -    | 360  |
| Veh in Median Storage, # | 0    | -     | -    | 0     | 0    | -    |
| Grade, %                 | 0    | -     | -    | 1     | 0    | -    |
| Peak Hour Factor         | 82   | 82    | 87   | 87    | 89   | 89   |
| Heavy Vehicles, %        | 0    | 0     | 0    | 1     | 0    | 0    |
| Mvmt Flow                | 7    | 55    | 34   | 1069  | 2571 | 2    |

| Major/Minor          | Minor2 |      | Major1 |   | Major2 |   |
|----------------------|--------|------|--------|---|--------|---|
| Conflicting Flow All | 3174   | 1285 | 2571   | 0 | -      | 0 |
| Stage 1              | 2571   | -    | -      | - | -      | - |
| Stage 2              | 603    | -    | -      | - | -      | - |
| Critical Hdwy        | 6.8    | 6.9  | 4.1    | - | -      | - |
| Critical Hdwy Stg 1  | 5.8    | -    | -      | - | -      | - |
| Critical Hdwy Stg 2  | 5.8    | -    | -      | - | -      | - |
| Follow-up Hdwy       | 3.5    | 3.3  | 2.2    | - | -      | - |
| Pot Cap-1 Maneuver   | 8      | 158  | 174    | - | -      | - |
| Stage 1              | 45     | -    | -      | - | -      | - |
| Stage 2              | 515    | -    | -      | - | -      | - |
| Platoon blocked, %   |        |      |        | - | -      | - |
| Mov Cap-1 Maneuver   | ~ 6    | 158  | 174    | - | -      | - |
| Mov Cap-2 Maneuver   | ~ 6    | -    | -      | - | -      | - |
| Stage 1              | 45     | -    | -      | - | -      | - |
| Stage 2              | 414    | -    | -      | - | -      | - |

| Approach             | EB    | NB | SB |
|----------------------|-------|----|----|
| HCM Control Delay, s | 179.5 | 1  | 0  |
| HCM LOS              | F     |    |    |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1  | EBLn2 | SBT | SBR |
|-----------------------|-------|-----|--------|-------|-----|-----|
| Capacity (veh/h)      | 174   | -   | 6      | 158   | -   | -   |
| HCM Lane V/C Ratio    | 0.198 | -   | 1.22   | 0.347 | -   | -   |
| HCM Control Delay (s) | 30.7  | \$  | 1230.3 | 39.4  | -   | -   |
| HCM Lane LOS          | D     | -   | F      | E     | -   | -   |
| HCM 95th %tile Q(veh) | 0.7   | -   | 1.7    | 1.4   | -   | -   |

Notes

~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Lanier Tract DRI

5: GA 53 & Lanier Valley Dr/Ahaluna Dr

phase one a.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Volume (vph)               | 21                                                                                | 6                                                                                 | 127                                                                               | 92                                                                                | 3                                                                                 | 27                                                                                | 61                                                                                  | 800                                                                                 | 47                                                                                  | 21                                                                                  | 2121                                                                                | 0                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 2%                                                                                |                                                                                   |                                                                                   | -4%                                                                               |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 100                                                                                 |                                                                                     | 0                                                                                   | 140                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.889                                                                             |                                                                                   |                                                                                   | 0.970                                                                             |                                                                                   |                                                                                     | 0.992                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   | 0.993                                                                             |                                                                                   |                                                                                   | 0.964                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1661                                                                              | 0                                                                                 | 0                                                                                 | 1812                                                                              | 0                                                                                 | 1796                                                                                | 3497                                                                                | 0                                                                                   | 1814                                                                                | 3628                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.945                                                                             |                                                                                   |                                                                                   | 0.481                                                                             |                                                                                   | 0.037                                                                               |                                                                                     |                                                                                     | 0.288                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1580                                                                              | 0                                                                                 | 0                                                                                 | 904                                                                               | 0                                                                                 | 70                                                                                  | 3497                                                                                | 0                                                                                   | 550                                                                                 | 3628                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 58                                                                                |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 340                                                                               |                                                                                   |                                                                                   | 322                                                                               |                                                                                   |                                                                                     | 888                                                                                 |                                                                                     |                                                                                     | 1417                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.7                                                                               |                                                                                   |                                                                                   | 7.3                                                                               |                                                                                   |                                                                                     | 13.5                                                                                |                                                                                     |                                                                                     | 21.5                                                                                |                                                                                     |
| Peak Hour Factor           | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.83                                                                              | 0.83                                                                              | 0.83                                                                              | 0.85                                                                                | 0.85                                                                                | 0.85                                                                                | 0.87                                                                                | 0.87                                                                                | 0.87                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 23                                                                                | 7                                                                                 | 140                                                                               | 111                                                                               | 4                                                                                 | 33                                                                                | 72                                                                                  | 941                                                                                 | 55                                                                                  | 24                                                                                  | 2438                                                                                | 0                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 170                                                                               | 0                                                                                 | 0                                                                                 | 148                                                                               | 0                                                                                 | 72                                                                                  | 996                                                                                 | 0                                                                                   | 24                                                                                  | 2438                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 |                                                                                     | 0                                                                                   | 336                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   |                                                                                     | 0                                                                                   | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 8                                                                                 | 8                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 10.6                                                                                | 23.0                                                                                |                                                                                     | 23.0                                                                                | 23.0                                                                                |                                                                                     |



# Lanier Tract DRI

## 5: GA 53 & Lanier Valley Dr/Ahaluna Dr

phase one a.m.

| Lane Group            | EBL   | EBT   | EBR | WBL   | WBT   | WBR | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
|-----------------------|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Total Split (s)       | 30.0  | 30.0  |     | 30.0  | 30.0  |     | 10.6  | 120.0 |     | 109.4 | 109.4 |     |
| Total Split (%)       | 20.0% | 20.0% |     | 20.0% | 20.0% |     | 7.1%  | 80.0% |     | 72.9% | 72.9% |     |
| Maximum Green (s)     | 23.4  | 23.4  |     | 23.4  | 23.4  |     | 5.0   | 113.9 |     | 103.3 | 103.3 |     |
| Yellow Time (s)       | 4.0   | 4.0   |     | 4.0   | 4.0   |     | 3.0   | 4.5   |     | 4.5   | 4.5   |     |
| All-Red Time (s)      | 2.6   | 2.6   |     | 2.6   | 2.6   |     | 2.6   | 1.6   |     | 1.6   | 1.6   |     |
| Lost Time Adjust (s)  |       | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Lost Time (s)   |       | 6.6   |     |       | 6.6   |     | 5.6   | 6.1   |     | 6.1   | 6.1   |     |
| Lead/Lag              |       |       |     |       |       |     | Lead  |       |     | Lag   | Lag   |     |
| Lead-Lag Optimize?    |       |       |     |       |       |     | Yes   |       |     | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode           | None  | None  |     | None  | None  |     | None  | C-Max |     | C-Max | C-Max |     |
| Act Effect Green (s)  |       | 23.4  |     |       | 23.4  |     | 114.4 | 113.9 |     | 103.3 | 103.3 |     |
| Actuated g/C Ratio    |       | 0.16  |     |       | 0.16  |     | 0.76  | 0.76  |     | 0.69  | 0.69  |     |
| v/c Ratio             |       | 0.58  |     |       | 1.01  |     | 0.65  | 0.37  |     | 0.06  | 0.98  |     |
| Control Delay         |       | 46.8  |     |       | 134.1 |     | 57.6  | 3.1   |     | 8.1   | 35.6  |     |
| Queue Delay           |       | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay           |       | 46.8  |     |       | 134.1 |     | 57.6  | 3.1   |     | 8.1   | 35.6  |     |
| LOS                   |       | D     |     |       | F     |     | E     | A     |     | A     | D     |     |
| Approach Delay        |       | 46.8  |     |       | 134.1 |     |       | 6.8   |     |       | 35.3  |     |
| Approach LOS          |       | D     |     |       | F     |     |       | A     |     |       | D     |     |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 26 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.01

Intersection Signal Delay: 31.7

Intersection LOS: C

Intersection Capacity Utilization 90.9%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 5: GA 53 & Lanier Valley Dr/Ahaluna Dr

|        |         |  |      |
|--------|---------|--|------|
|        |         |  |      |
| 120 s  |         |  | 30 s |
|        |         |  |      |
| 10.6 s | 109.4 s |  | 30 s |

## Lanier Tract DRI

## 6: 53-Dawsonville Hwy &amp; Academy Sports

phase one a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |  |  |  |  |  |  |  |
| Volume (vph)               | 2                                                                                 | 0                                                                                 | 7                                                                                 | 2                                                                                 | 0                                                                                 | 0                                                                                 | 12                                                                                  | 878                                                                                 | 10                                                                                  | 6                                                                                   | 2269                                                                                | 4                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 4%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 70                                                                                | 200                                                                                 |                                                                                     | 170                                                                                 | 190                                                                                 |                                                                                     | 360                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1805                                                                              | 1900                                                                              | 1615                                                                              | 1769                                                                              | 1862                                                                              | 1862                                                                              | 1796                                                                                | 3556                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 0.031                                                                               |                                                                                     |                                                                                     | 0.277                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1900                                                                              | 1900                                                                              | 1615                                                                              | 1862                                                                              | 1862                                                                              | 1862                                                                              | 59                                                                                  | 3556                                                                                | 1607                                                                                | 526                                                                                 | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 67                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 68                                                                                  |                                                                                     |                                                                                     | 68                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 262                                                                               |                                                                                   |                                                                                   | 246                                                                               |                                                                                   |                                                                                     | 1836                                                                                |                                                                                     |                                                                                     | 685                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.1                                                                               |                                                                                   |                                                                                   | 6.7                                                                               |                                                                                   |                                                                                     | 27.8                                                                                |                                                                                     |                                                                                     | 10.4                                                                                |                                                                                     |
| Peak Hour Factor           | 0.67                                                                              | 0.67                                                                              | 0.67                                                                              | 0.50                                                                              | 0.50                                                                              | 0.50                                                                              | 0.86                                                                                | 0.86                                                                                | 0.86                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 3                                                                                 | 0                                                                                 | 10                                                                                | 4                                                                                 | 0                                                                                 | 0                                                                                 | 14                                                                                  | 1021                                                                                | 12                                                                                  | 7                                                                                   | 2521                                                                                | 4                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 3                                                                                 | 0                                                                                 | 10                                                                                | 4                                                                                 | 0                                                                                 | 0                                                                                 | 14                                                                                  | 1021                                                                                | 12                                                                                  | 7                                                                                   | 2521                                                                                | 4                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              |                                                                                   | Perm                                                                              | Perm                                                                              |                                                                                   | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 2                                                                                   |                                                                                     | 2                                                                                   | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 42.0                                                                              | 42.0                                                                              | 42.0                                                                              | 42.4                                                                              | 42.4                                                                              | 42.4                                                                              | 11.4                                                                                | 30.3                                                                                | 30.3                                                                                | 11.0                                                                                | 29.3                                                                                | 29.3                                                                                |

# Lanier Tract DRI

## 6: 53-Dawsonville Hwy & Academy Sports

phase one a.m.

|                         |  |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 42.4                                                                               | 42.4  | 42.4  | 42.4  | 42.4  | 42.4  | 11.4  | 96.6  | 96.6  | 11.0  | 96.2  | 96.2  |
| Total Split (%)         | 28.3%                                                                              | 28.3% | 28.3% | 28.3% | 28.3% | 28.3% | 7.6%  | 64.4% | 64.4% | 7.3%  | 64.1% | 64.1% |
| Maximum Green (s)       | 36.0                                                                               | 36.0  | 36.0  | 36.0  | 36.0  | 36.0  | 5.0   | 90.4  | 90.4  | 5.0   | 90.0  | 90.0  |
| Yellow Time (s)         | 3.4                                                                                | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 4.3   | 4.3   | 3.0   | 4.3   | 4.3   |
| All-Red Time (s)        | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 1.9   | 1.9   | 3.0   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.4                                                                                | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.2   | 6.2   | 6.0   | 6.2   | 6.2   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           | 4.0                                                                                | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 23.0                                                                               | 23.0  | 23.0  | 32.0  | 32.0  | 32.0  |       | 20.0  | 20.0  |       | 19.0  | 19.0  |
| Pedestrian Calls (#/hr) | 0                                                                                  | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    | 6.1                                                                                |       | 6.1   | 6.1   |       |       | 137.2 | 139.9 | 139.9 | 136.1 | 137.4 | 137.4 |
| Actuated g/C Ratio      | 0.04                                                                               |       | 0.04  | 0.04  |       |       | 0.91  | 0.93  | 0.93  | 0.91  | 0.92  | 0.92  |
| v/c Ratio               | 0.04                                                                               |       | 0.08  | 0.05  |       |       | 0.12  | 0.31  | 0.01  | 0.01  | 0.76  | 0.00  |
| Control Delay           | 69.5                                                                               |       | 1.1   | 70.0  |       |       | 6.2   | 1.0   | 0.0   | 0.8   | 4.9   | 0.0   |
| Queue Delay             | 0.0                                                                                |       | 0.0   | 0.0   |       |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay             | 69.5                                                                               |       | 1.1   | 70.0  |       |       | 6.2   | 1.0   | 0.0   | 0.8   | 4.9   | 0.0   |
| LOS                     | E                                                                                  |       | A     | E     |       |       | A     | A     | A     | A     | A     | A     |
| Approach Delay          |                                                                                    |       |       |       |       |       |       | 1.1   |       |       | 4.9   |       |
| Approach LOS            |                                                                                    |       |       |       |       |       |       | A     |       |       | A     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 27 (18%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 145

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.76

Intersection Signal Delay: 3.9

Intersection LOS: A

Intersection Capacity Utilization 86.9%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 6: 53-Dawsonville Hwy & Academy Sports

|                                                                                        |                                                                                            |  |                                                                                          |
|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------|
|  p1 |  p2 (R) |  |  p4 |
| 11 s                                                                                   | 96.6 s                                                                                     |  | 42.4 s                                                                                   |
|  p5 |  p6 (R) |  |  p8 |
| 11.4 s                                                                                 | 96.2 s                                                                                     |  | 42.4 s                                                                                   |

## Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 &amp; McEver Road/McEver

phase one a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |                                                                                   |   |  |  |  |  |  |
| Volume (vph)               | 450                                                                               | 31                                                                                | 378                                                                               | 46                                                                                | 21                                                                                | 22                                                                                | 311                                                                                 | 553                                                                                 | 61                                                                                  | 34                                                                                  | 1341                                                                                | 935                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 1%                                                                                |                                                                                   |                                                                                   | 5%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 180                                                                               |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 310                                                                                 |                                                                                     | 185                                                                                 | 255                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 50                                                                                |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.872                                                                             | 0.850                                                                             |                                                                                   | 0.924                                                                             |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 3484                                                                              | 1566                                                                              | 1527                                                                              | 1760                                                                              | 1712                                                                              | 0                                                                                 | 3484                                                                                | 3487                                                                                | 1575                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   | 0.599                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 3484                                                                              | 1566                                                                              | 1527                                                                              | 1110                                                                              | 1712                                                                              | 0                                                                                 | 3484                                                                                | 3487                                                                                | 1575                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 183                                                                               | 207                                                                               |                                                                                   | 34                                                                                |                                                                                   |                                                                                     |                                                                                     | 184                                                                                 |                                                                                     |                                                                                     | 542                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 45                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 580                                                                               |                                                                                   |                                                                                   | 331                                                                               |                                                                                   |                                                                                     | 921                                                                                 |                                                                                     |                                                                                     | 1624                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 8.8                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                     | 14.0                                                                                |                                                                                     |                                                                                     | 24.6                                                                                |                                                                                     |
| Peak Hour Factor           | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.62                                                                              | 0.62                                                                              | 0.62                                                                              | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 3%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 464                                                                               | 32                                                                                | 390                                                                               | 74                                                                                | 34                                                                                | 35                                                                                | 334                                                                                 | 595                                                                                 | 66                                                                                  | 38                                                                                  | 1490                                                                                | 1039                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   | 47%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 464                                                                               | 215                                                                               | 207                                                                               | 74                                                                                | 69                                                                                | 0                                                                                 | 334                                                                                 | 595                                                                                 | 66                                                                                  | 38                                                                                  | 1490                                                                                | 1039                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 24                                                                                |                                                                                   |                                                                                   | 24                                                                                |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                             | NA                                                                                |                                                                                   | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 8                                                                                 |                                                                                   | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 8                                                                                 | 8                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 13.2                                                                              | 50.2                                                                              | 50.2                                                                              | 11.6                                                                              | 48.2                                                                              |                                                                                   | 13.4                                                                                | 35.6                                                                                | 35.6                                                                                | 12.9                                                                                | 44.6                                                                                | 44.6                                                                                |

Lanier Tract DRI

8: Dawsonville Highway/GA 53 & McEver Road/McEver

phase one a.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Total Split (s)         | 23.0                                                                              | 59.1                                                                              | 59.1                                                                              | 12.1                                                                              | 48.2                                                                              |                                                                                   | 19.0                                                                               | 63.0                                                                                | 63.0                                                                                | 15.8                                                                                | 59.8                                                                                | 59.8                                                                                |
| Total Split (%)         | 15.3%                                                                             | 39.4%                                                                             | 39.4%                                                                             | 8.1%                                                                              | 32.1%                                                                             |                                                                                   | 12.7%                                                                              | 42.0%                                                                               | 42.0%                                                                               | 10.5%                                                                               | 39.9%                                                                               | 39.9%                                                                               |
| Maximum Green (s)       | 15.7                                                                              | 51.8                                                                              | 51.8                                                                              | 5.6                                                                               | 40.9                                                                              |                                                                                   | 11.5                                                                               | 56.4                                                                                | 56.4                                                                                | 8.6                                                                                 | 53.2                                                                                | 53.2                                                                                |
| Yellow Time (s)         | 4.3                                                                               | 4.3                                                                               | 4.3                                                                               | 3.5                                                                               | 4.3                                                                               |                                                                                   | 4.5                                                                                | 4.4                                                                                 | 4.4                                                                                 | 4.2                                                                                 | 4.4                                                                                 | 4.4                                                                                 |
| All-Red Time (s)        | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 2.2                                                                                 | 2.2                                                                                 | 3.0                                                                                 | 2.2                                                                                 | 2.2                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 7.3                                                                               | 7.3                                                                               | 7.3                                                                               | 6.5                                                                               | 7.3                                                                               |                                                                                   | 7.5                                                                                | 6.6                                                                                 | 6.6                                                                                 | 7.2                                                                                 | 6.6                                                                                 | 6.6                                                                                 |
| Lead/Lag                | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lag                                                                               |                                                                                   | Lag                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lead                                                                                | Lead                                                                                |
| Lead-Lag Optimize?      | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               |                                                                                   | Yes                                                                                | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              |                                                                                   | None                                                                               | C-Max                                                                               | C-Max                                                                               | None                                                                                | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    | 4.0                                                                                 | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |
| Flash Dont Walk (s)     |                                                                                   | 38.0                                                                              | 38.0                                                                              |                                                                                   | 36.0                                                                              |                                                                                   |                                                                                    | 25.0                                                                                | 25.0                                                                                |                                                                                     | 34.0                                                                                | 34.0                                                                                |
| Pedestrian Calls (#/hr) |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |
| Act Effect Green (s)    | 16.1                                                                              | 17.6                                                                              | 17.6                                                                              | 14.0                                                                              | 8.9                                                                               |                                                                                   | 11.5                                                                               | 93.2                                                                                | 93.2                                                                                | 8.5                                                                                 | 87.4                                                                                | 87.4                                                                                |
| Actuated g/C Ratio      | 0.11                                                                              | 0.12                                                                              | 0.12                                                                              | 0.09                                                                              | 0.06                                                                              |                                                                                   | 0.08                                                                               | 0.62                                                                                | 0.62                                                                                | 0.06                                                                                | 0.58                                                                                | 0.58                                                                                |
| v/c Ratio               | 1.24                                                                              | 0.62                                                                              | 0.57                                                                              | 0.58                                                                              | 0.52                                                                              |                                                                                   | 1.25                                                                               | 0.27                                                                                | 0.06                                                                                | 0.37                                                                                | 0.70                                                                                | 0.89                                                                                |
| Control Delay           | 183.1                                                                             | 20.5                                                                              | 13.4                                                                              | 70.0                                                                              | 51.0                                                                              |                                                                                   | 197.4                                                                              | 17.7                                                                                | 1.4                                                                                 | 74.8                                                                                | 23.9                                                                                | 17.1                                                                                |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 183.1                                                                             | 20.5                                                                              | 13.4                                                                              | 70.0                                                                              | 51.0                                                                              |                                                                                   | 197.4                                                                              | 17.7                                                                                | 1.4                                                                                 | 74.8                                                                                | 23.9                                                                                | 17.1                                                                                |
| LOS                     | F                                                                                 | C                                                                                 | B                                                                                 | E                                                                                 | D                                                                                 |                                                                                   | F                                                                                  | B                                                                                   | A                                                                                   | E                                                                                   | C                                                                                   | B                                                                                   |
| Approach Delay          |                                                                                   | 104.0                                                                             |                                                                                   |                                                                                   | 60.9                                                                              |                                                                                   |                                                                                    | 77.0                                                                                |                                                                                     |                                                                                     | 21.9                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | F                                                                                 |                                                                                   |                                                                                   | E                                                                                 |                                                                                   |                                                                                    | E                                                                                   |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 19 (13%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.25

Intersection Signal Delay: 50.9

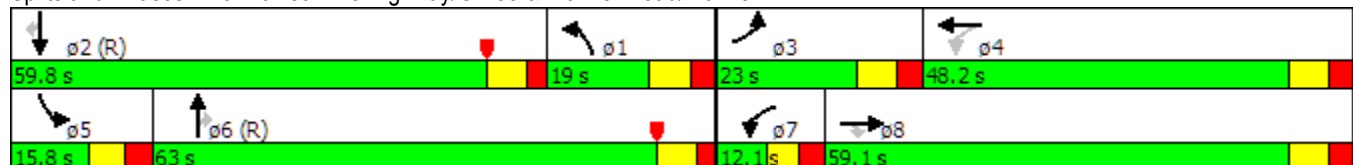
Intersection LOS: D

Intersection Capacity Utilization 88.8%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 8: Dawsonville Highway/GA 53 & McEver Road/McEver



## Lanier Tract DRI

## 9: Dawsonville Highway &amp; Greenhill Circle/Greenhill Circle

phase one a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 74                                                                                | 1                                                                                 | 156                                                                               | 7                                                                                 | 1                                                                                 | 4                                                                                 | 149                                                                                 | 872                                                                                 | 11                                                                                  | 13                                                                                  | 1599                                                                                | 57                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 3%                                                                                |                                                                                   |                                                                                   | 7%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 190                                                                                 |                                                                                     | 190                                                                                 | 185                                                                                 |                                                                                     | 100                                                                                 |
| Storage Lanes              | 0                                                                                 |                                                                                   | 1                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              |                                                                                   | 0.953                                                                             |                                                                                   |                                                                                   | 0.957                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1784                                                                              | 1591                                                                              | 0                                                                                 | 1755                                                                              | 1558                                                                              | 1796                                                                                | 3522                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   | 0.721                                                                             |                                                                                   |                                                                                   | 0.751                                                                             |                                                                                   | 0.074                                                                               |                                                                                     |                                                                                     | 0.283                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1349                                                                              | 1591                                                                              | 0                                                                                 | 1377                                                                              | 1558                                                                              | 140                                                                                 | 3522                                                                                | 1607                                                                                | 538                                                                                 | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 131                                                                               |                                                                                   |                                                                                   | 102                                                                               |                                                                                     |                                                                                     | 57                                                                                  |                                                                                     |                                                                                     | 101                                                                                 |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 288                                                                               |                                                                                   |                                                                                   | 254                                                                               |                                                                                   |                                                                                     | 778                                                                                 |                                                                                     |                                                                                     | 921                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.9                                                                               |                                                                                   |                                                                                   | 6.9                                                                               |                                                                                   |                                                                                     | 11.8                                                                                |                                                                                     |                                                                                     | 14.0                                                                                |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.69                                                                              | 0.69                                                                              | 0.69                                                                              | 0.86                                                                                | 0.86                                                                                | 0.86                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 82                                                                                | 1                                                                                 | 173                                                                               | 10                                                                                | 1                                                                                 | 6                                                                                 | 173                                                                                 | 1014                                                                                | 13                                                                                  | 14                                                                                  | 1738                                                                                | 62                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 83                                                                                | 173                                                                               | 0                                                                                 | 11                                                                                | 6                                                                                 | 173                                                                                 | 1014                                                                                | 13                                                                                  | 14                                                                                  | 1738                                                                                | 62                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.02                                                                              | 1.02                                                                              | 1.02                                                                              | 1.05                                                                              | 1.05                                                                              | 1.05                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              | 23.0                                                                              | 39.9                                                                              | 39.9                                                                              | 39.9                                                                              | 11.0                                                                                | 28.0                                                                                | 28.0                                                                                | 10.0                                                                                | 36.0                                                                                | 36.0                                                                                |

# Lanier Tract DRI

## 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle

phase one a.m.

|                         |  |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 39.9                                                                               | 39.9  | 39.9  | 39.9  | 39.9  | 39.9  | 21.0  | 100.1 | 100.1 | 10.0  | 89.1  | 89.1  |
| Total Split (%)         | 26.6%                                                                              | 26.6% | 26.6% | 26.6% | 26.6% | 26.6% | 14.0% | 66.7% | 66.7% | 6.7%  | 59.4% | 59.4% |
| Maximum Green (s)       | 34.0                                                                               | 34.0  | 34.0  | 34.0  | 34.0  | 34.0  | 15.0  | 94.1  | 94.1  | 5.0   | 83.1  | 83.1  |
| Yellow Time (s)         | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 4.4   | 4.4   | 3.5   | 4.4   | 4.4   |
| All-Red Time (s)        | 2.9                                                                                | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 3.0   | 1.6   | 1.6   | 1.5   | 1.6   | 1.6   |
| Lost Time Adjust (s)    |                                                                                    | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |                                                                                    | 5.9   | 5.9   |       | 5.9   | 5.9   | 6.0   | 6.0   | 6.0   | 5.0   | 6.0   | 6.0   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           |                                                                                    |       |       | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    |       |       | 30.0  | 30.0  | 30.0  |       | 18.0  | 18.0  |       | 26.0  | 26.0  |
| Pedestrian Calls (#/hr) |                                                                                    |       |       | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    |                                                                                    | 14.6  | 14.6  |       | 14.6  | 14.6  | 123.5 | 119.1 | 119.1 | 108.7 | 102.0 | 102.0 |
| Actuated g/C Ratio      |                                                                                    | 0.10  | 0.10  |       | 0.10  | 0.10  | 0.82  | 0.79  | 0.79  | 0.72  | 0.68  | 0.68  |
| v/c Ratio               |                                                                                    | 0.64  | 0.64  |       | 0.08  | 0.02  | 0.60  | 0.36  | 0.01  | 0.03  | 0.71  | 0.05  |
| Control Delay           |                                                                                    | 85.5  | 28.7  |       | 59.9  | 0.2   | 32.6  | 4.6   | 0.0   | 4.2   | 14.7  | 0.9   |
| Queue Delay             |                                                                                    | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.1   | 0.0   |
| Total Delay             |                                                                                    | 85.5  | 28.7  |       | 59.9  | 0.2   | 32.6  | 4.6   | 0.0   | 4.2   | 14.8  | 0.9   |
| LOS                     |                                                                                    | F     | C     |       | E     | A     | C     | A     | A     | A     | B     | A     |
| Approach Delay          |                                                                                    | 47.1  |       |       | 38.8  |       |       | 8.6   |       |       | 14.3  |       |
| Approach LOS            |                                                                                    | D     |       |       | D     |       |       | A     |       |       | B     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 14.9

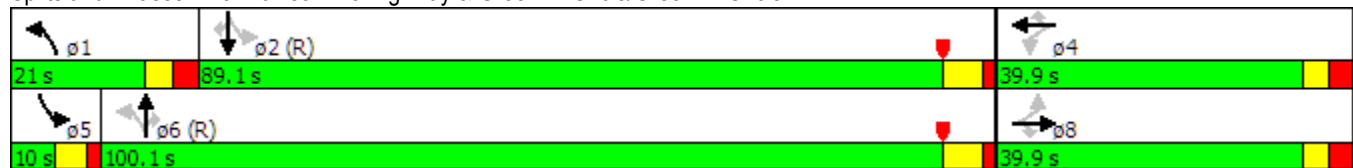
Intersection LOS: B

Intersection Capacity Utilization 78.2%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle



## Lanier Tract DRI

## 10: Dawsonville Highway &amp; Shallowford Rd/Best Buy

phase one a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |                                                                                   |  |  |   |  |  |  |  |  |
| Volume (vph)               | 160                                                                               | 2                                                                                 | 9                                                                                 | 2                                                                                 | 4                                                                                 | 3                                                                                 | 11                                                                                  | 847                                                                                 | 14                                                                                  | 1                                                                                   | 1415                                                                                | 386                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | -1%                                                                               |                                                                                   |                                                                                   | 10%                                                                               |                                                                                   |                                                                                     | -4%                                                                                 |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 350                                                                               |                                                                                   | 350                                                                               | 0                                                                                 |                                                                                   | 0                                                                                 | 350                                                                                 |                                                                                     | 150                                                                                 | 265                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 100                                                                               |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             | 0.953                                                                             |                                                                                   |                                                                                   | 0.982                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1723                                                                              | 1729                                                                              | 1623                                                                              | 0                                                                                 | 1773                                                                              | 1534                                                                              | 1841                                                                                | 3646                                                                                | 1647                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             | 0.953                                                                             |                                                                                   |                                                                                   | 0.982                                                                             |                                                                                   | 0.117                                                                               |                                                                                     |                                                                                     | 0.280                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1723                                                                              | 1729                                                                              | 1623                                                                              | 0                                                                                 | 1773                                                                              | 1534                                                                              | 227                                                                                 | 3646                                                                                | 1647                                                                                | 535                                                                                 | 3592                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 113                                                                               |                                                                                   |                                                                                   | 119                                                                               |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     | 220                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 653                                                                               |                                                                                   |                                                                                   | 178                                                                               |                                                                                   |                                                                                     | 957                                                                                 |                                                                                     |                                                                                     | 778                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 9.9                                                                               |                                                                                   |                                                                                   | 4.9                                                                               |                                                                                   |                                                                                     | 14.5                                                                                |                                                                                     |                                                                                     | 11.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.84                                                                              | 0.84                                                                              | 0.84                                                                              | 0.56                                                                              | 0.56                                                                              | 0.56                                                                              | 0.83                                                                                | 0.83                                                                                | 0.83                                                                                | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 190                                                                               | 2                                                                                 | 11                                                                                | 4                                                                                 | 7                                                                                 | 5                                                                                 | 13                                                                                  | 1020                                                                                | 17                                                                                  | 1                                                                                   | 1522                                                                                | 415                                                                                 |
| Shared Lane Traffic (%)    | 49%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 97                                                                                | 95                                                                                | 11                                                                                | 0                                                                                 | 11                                                                                | 5                                                                                 | 13                                                                                  | 1020                                                                                | 17                                                                                  | 1                                                                                   | 1522                                                                                | 415                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 0.99                                                                              | 0.99                                                                              | 0.99                                                                              | 1.07                                                                              | 1.07                                                                              | 1.07                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Split                                                                             | NA                                                                                | Perm                                                                              | Split                                                                             | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | Perm                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 3                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 3                                                                                 | 3                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 36.7                                                                              | 36.7                                                                              | 36.7                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                                | 28.8                                                                                | 28.8                                                                                | 30.8                                                                                | 30.8                                                                                | 30.8                                                                                |



# Lanier Tract DRI

## 10: Dawsonville Highway & Shallowford Rd/Best Buy

phase one a.m.



| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Total Split (s)         | 36.7  | 36.7  | 36.7  | 38.9  | 38.9  | 38.9  | 10.8  | 74.4  | 74.4  | 63.6  | 63.6  | 63.6  |
| Total Split (%)         | 24.5% | 24.5% | 24.5% | 25.9% | 25.9% | 25.9% | 7.2%  | 49.6% | 49.6% | 42.4% | 42.4% | 42.4% |
| Maximum Green (s)       | 30.0  | 30.0  | 30.0  | 33.0  | 33.0  | 33.0  | 5.0   | 67.6  | 67.6  | 56.8  | 56.8  | 56.8  |
| Yellow Time (s)         | 4.5   | 4.5   | 4.5   | 3.0   | 3.0   | 3.0   | 3.0   | 4.9   | 4.9   | 4.9   | 4.9   | 4.9   |
| All-Red Time (s)        | 2.2   | 2.2   | 2.2   | 2.9   | 2.9   | 2.9   | 2.8   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.7   | 6.7   | 6.7   |       | 5.9   | 5.9   | 5.8   | 6.8   | 6.8   | 6.8   | 6.8   | 6.8   |
| Lead/Lag                | Lead  | Lead  | Lead  | Lag   | Lag   | Lag   | Lead  |       |       | Lag   | Lag   | Lag   |
| Lead-Lag Optimize?      | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |       |       | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None  | None  | None  | None  | None  | None  | None  | C-Min | C-Min | C-Min | C-Min | C-Min |
| Walk Time (s)           | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 26.0  | 26.0  | 26.0  | 29.0  | 29.0  | 29.0  |       | 18.0  | 18.0  | 20.0  | 20.0  | 20.0  |
| Pedestrian Calls (#/hr) | 0     | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     | 0     | 0     | 0     |
| Act Effect Green (s)    | 13.8  | 13.8  | 13.8  |       | 6.5   | 6.5   | 118.3 | 117.3 | 117.3 | 112.5 | 112.5 | 112.5 |
| Actuated g/C Ratio      | 0.09  | 0.09  | 0.09  |       | 0.04  | 0.04  | 0.79  | 0.78  | 0.78  | 0.75  | 0.75  | 0.75  |
| v/c Ratio               | 0.61  | 0.60  | 0.04  |       | 0.14  | 0.03  | 0.05  | 0.36  | 0.01  | 0.00  | 0.56  | 0.33  |
| Control Delay           | 81.4  | 80.4  | 0.3   |       | 72.5  | 0.3   | 6.0   | 6.3   | 0.0   | 7.0   | 11.2  | 4.5   |
| Queue Delay             | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.4   | 0.0   |
| Total Delay             | 81.4  | 80.4  | 0.3   |       | 72.5  | 0.3   | 6.0   | 6.3   | 0.0   | 7.0   | 11.7  | 4.5   |
| LOS                     | F     | F     | A     |       | E     | A     | A     | A     | A     | A     | B     | A     |
| Approach Delay          |       | 76.5  |       |       | 49.9  |       |       | 6.2   |       |       | 10.1  |       |
| Approach LOS            |       | E     |       |       | D     |       |       | A     |       |       | B     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 45 (30%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.61

Intersection Signal Delay: 13.3

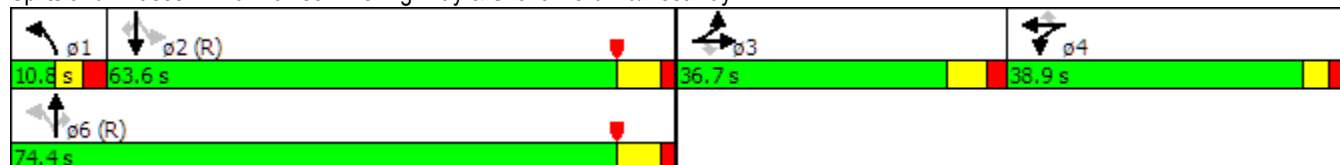
Intersection LOS: B

Intersection Capacity Utilization 63.6%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 10: Dawsonville Highway & Shallowford Rd/Best Buy



Lanier Tract DRI  
1: Sportsman Club Road & Strickland Drive

phase one p.m.

| Intersection             |        |       |        |      |        |           |
|--------------------------|--------|-------|--------|------|--------|-----------|
| Int Delay, s/veh         | 3.2    |       |        |      |        |           |
|                          |        |       |        |      |        |           |
| Movement                 | WBL    | WBR   |        | NBT  | NBR    | SBL SBT   |
| Vol, veh/h               | 24     | 0     |        | 32   | 28     | 0 25      |
| Conflicting Peds, #/hr   | 0      | 0     |        | 0    | 0      | 0 0       |
| Sign Control             | Stop   | Stop  |        | Free | Free   | Free Free |
| RT Channelized           | -      | None  |        | -    | None   | - None    |
| Storage Length           | 0      | -     |        | -    | -      | - -       |
| Veh in Median Storage, # | 0      | -     |        | 0    | -      | - 0       |
| Grade, %                 | 0      | -     |        | 0    | -      | - 0       |
| Peak Hour Factor         | 44     | 44    |        | 86   | 86     | 82 82     |
| Heavy Vehicles, %        | 2      | 2     |        | 2    | 2      | 2 2       |
| Mvmt Flow                | 55     | 0     |        | 37   | 33     | 0 30      |
|                          |        |       |        |      |        |           |
| Major/Minor              | Minor1 |       | Major1 |      | Major2 |           |
| Conflicting Flow All     | 83     | 53    |        | 0    | 0      | 70 0      |
| Stage 1                  | 53     | -     |        | -    | -      | - -       |
| Stage 2                  | 30     | -     |        | -    | -      | - -       |
| Critical Hdwy            | 6.42   | 6.22  |        | -    | -      | 4.12 -    |
| Critical Hdwy Stg 1      | 5.42   | -     |        | -    | -      | - -       |
| Critical Hdwy Stg 2      | 5.42   | -     |        | -    | -      | - -       |
| Follow-up Hdwy           | 3.518  | 3.318 |        | -    | -      | 2.218 -   |
| Pot Cap-1 Maneuver       | 919    | 1014  |        | -    | -      | 1531 -    |
| Stage 1                  | 970    | -     |        | -    | -      | - -       |
| Stage 2                  | 993    | -     |        | -    | -      | - -       |
| Platoon blocked, %       |        |       |        | -    | -      | -         |
| Mov Cap-1 Maneuver       | 919    | 1014  |        | -    | -      | 1531 -    |
| Mov Cap-2 Maneuver       | 919    | -     |        | -    | -      | - -       |
| Stage 1                  | 970    | -     |        | -    | -      | - -       |
| Stage 2                  | 993    | -     |        | -    | -      | - -       |
|                          |        |       |        |      |        |           |
| Approach                 | WB     |       | NB     |      | SB     |           |
| HCM Control Delay, s     | 9.2    |       | 0      |      | 0      |           |
| HCM LOS                  | A      |       |        |      |        |           |
|                          |        |       |        |      |        |           |
| Minor Lane/Major Mvmt    | NBT    | NBR   | WBLn1  | SBL  | SBT    |           |
| Capacity (veh/h)         | -      | -     | 919    | 1531 | -      |           |
| HCM Lane V/C Ratio       | -      | -     | 0.059  | -    | -      |           |
| HCM Control Delay (s)    | -      | -     | 9.2    | 0    | -      |           |
| HCM Lane LOS             | -      | -     | A      | A    | -      |           |
| HCM 95th %tile Q(veh)    | -      | -     | 0.2    | 0    | -      |           |

Lanier Tract DRI  
2: GA 53 & Sportsman Club Road

phase one p.m.

| Intersection                                                                                                         |        |       |      |        |       |      |        |           |      |           |      |      |
|----------------------------------------------------------------------------------------------------------------------|--------|-------|------|--------|-------|------|--------|-----------|------|-----------|------|------|
| Int Delay, s/veh                                                                                                     | 74.4   |       |      |        |       |      |        |           |      |           |      |      |
|                                                                                                                      |        |       |      |        |       |      |        |           |      |           |      |      |
| Movement                                                                                                             | EBL    | EBT   | EBR  | WBL    | WBT   | WBR  | NBL    | NBT       | NBR  | SBL       | SBT  | SBR  |
| Vol, veh/h                                                                                                           | 22     | 1166  | 0    | 26     | 1878  | 34   | 0      | 0         | 0    | 42        | 0    | 23   |
| Conflicting Peds, #/hr                                                                                               | 0      | 0     | 0    | 0      | 0     | 0    | 0      | 0         | 0    | 0         | 0    | 0    |
| Sign Control                                                                                                         | Free   | Free  | Free | Free   | Free  | Free | Stop   | Stop      | Stop | Stop      | Stop | Stop |
| RT Channelized                                                                                                       | -      | -     | None | -      | -     | None | -      | -         | None | -         | -    | None |
| Storage Length                                                                                                       | 0      | -     | -    | 0      | -     | -    | -      | -         | -    | -         | -    | -    |
| Veh in Median Storage, #                                                                                             | -      | 0     | -    | -      | 0     | -    | -      | 0         | -    | -         | 0    | -    |
| Grade, %                                                                                                             | -      | 0     | -    | -      | 0     | -    | -      | 0         | -    | -         | 0    | -    |
| Peak Hour Factor                                                                                                     | 95     | 95    | 95   | 96     | 96    | 96   | 92     | 92        | 92   | 75        | 75   | 75   |
| Heavy Vehicles, %                                                                                                    | 2      | 2     | 2    | 2      | 2     | 2    | 2      | 2         | 2    | 2         | 2    | 2    |
| Mvmt Flow                                                                                                            | 23     | 1227  | 0    | 27     | 1956  | 35   | 0      | 0         | 0    | 56        | 0    | 31   |
|                                                                                                                      |        |       |      |        |       |      |        |           |      |           |      |      |
| Major/Minor                                                                                                          | Major1 |       |      | Major2 |       |      | Minor1 |           |      | Minor2    |      |      |
| Conflicting Flow All                                                                                                 | 1992   | 0     | 0    | 1227   | 0     | 0    | 2306   | 3320      | 614  | 2688      | 3302 | 996  |
| Stage 1                                                                                                              | -      | -     | -    | -      | -     | -    | 1274   | 1274      | -    | 2028      | 2028 | -    |
| Stage 2                                                                                                              | -      | -     | -    | -      | -     | -    | 1032   | 2046      | -    | 660       | 1274 | -    |
| Critical Hdwy                                                                                                        | 4.14   | -     | -    | 4.14   | -     | -    | 7.54   | 6.54      | 6.94 | 7.54      | 6.54 | 6.94 |
| Critical Hdwy Stg 1                                                                                                  | -      | -     | -    | -      | -     | -    | 6.54   | 5.54      | -    | 6.54      | 5.54 | -    |
| Critical Hdwy Stg 2                                                                                                  | -      | -     | -    | -      | -     | -    | 6.54   | 5.54      | -    | 6.54      | 5.54 | -    |
| Follow-up Hdwy                                                                                                       | 2.22   | -     | -    | 2.22   | -     | -    | 3.52   | 4.02      | 3.32 | 3.52      | 4.02 | 3.32 |
| Pot Cap-1 Maneuver                                                                                                   | 285    | -     | -    | 564    | -     | -    | 21     | 8         | 435  | ~ 10      | 8    | 243  |
| Stage 1                                                                                                              | -      | -     | -    | -      | -     | -    | 177    | 236       | -    | 59        | 100  | -    |
| Stage 2                                                                                                              | -      | -     | -    | -      | -     | -    | 249    | 98        | -    | 418       | 236  | -    |
| Platoon blocked, %                                                                                                   |        | -     | -    |        | -     | -    |        |           |      |           |      |      |
| Mov Cap-1 Maneuver                                                                                                   | 285    | -     | -    | 564    | -     | -    | 17     | 7         | 435  | ~ 9       | 7    | 243  |
| Mov Cap-2 Maneuver                                                                                                   | -      | -     | -    | -      | -     | -    | 17     | 7         | -    | ~ 9       | 7    | -    |
| Stage 1                                                                                                              | -      | -     | -    | -      | -     | -    | 163    | 217       | -    | ~ 54      | 95   | -    |
| Stage 2                                                                                                              | -      | -     | -    | -      | -     | -    | 207    | 93        | -    | 384       | 217  | -    |
|                                                                                                                      |        |       |      |        |       |      |        |           |      |           |      |      |
| Approach                                                                                                             | EB     |       |      | WB     |       |      | NB     |           |      | SB        |      |      |
| HCM Control Delay, s                                                                                                 | 0.3    |       |      | 0.2    |       |      | 0      |           |      | \$ 2872.3 |      |      |
| HCM LOS                                                                                                              |        |       |      |        |       |      | A      |           |      | F         |      |      |
|                                                                                                                      |        |       |      |        |       |      |        |           |      |           |      |      |
| Minor Lane/Major Mvmt                                                                                                | NBLn1  | EBL   | EBT  | EBR    | WBL   | WBT  | WBR    | SBLn1     |      |           |      |      |
| Capacity (veh/h)                                                                                                     | -      | 285   | -    | -      | 564   | -    | -      | 14        |      |           |      |      |
| HCM Lane V/C Ratio                                                                                                   | -      | 0.081 | -    | -      | 0.048 | -    | -      | 6.19      |      |           |      |      |
| HCM Control Delay (s)                                                                                                | 0      | 18.7  | -    | -      | 11.7  | -    |        | \$ 2872.3 |      |           |      |      |
| HCM Lane LOS                                                                                                         | A      | C     | -    | -      | B     | -    | -      | F         |      |           |      |      |
| HCM 95th %tile Q(veh)                                                                                                | -      | 0.3   | -    | -      | 0.2   | -    | -      | 11.8      |      |           |      |      |
| Notes                                                                                                                |        |       |      |        |       |      |        |           |      |           |      |      |
| ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |        |       |      |        |       |      |        |           |      |           |      |      |

Lanier Tract DRI  
3: Avonlea Way & GA 53

phase one p.m.

Intersection

Int Delay, s/veh 4.2

| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol, veh/h               | 12   | 0    | 52   | 2    | 0    | 11   | 68   | 1858 | 17   | 10   | 1263 | 15   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | 0    | -    | 0    | 0    | -    | 0    | 0    | -    | -    | 0    | -    | 0    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 76   | 76   | 76   | 80   | 80   | 80   | 95   | 95   | 95   | 100  | 100  | 100  |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 16   | 0    | 68   | 2    | 0    | 14   | 72   | 1956 | 18   | 10   | 1263 | 15   |

| Major/Minor          | Minor2 |      |      | Minor1 |      |      | Major1 |   |   | Major2 |   |   |
|----------------------|--------|------|------|--------|------|------|--------|---|---|--------|---|---|
| Conflicting Flow All | 2404   | 3400 | 632  | 2760   | 3391 | 987  | 1263   | 0 | 0 | 1974   | 0 | 0 |
| Stage 1              | 1283   | 1283 | -    | 2108   | 2108 | -    | -      | - | - | -      | - | - |
| Stage 2              | 1121   | 2117 | -    | 652    | 1283 | -    | -      | - | - | -      | - | - |
| Critical Hdwy        | 7.54   | 6.54 | 6.94 | 7.54   | 6.54 | 6.94 | 4.14   | - | - | 4.14   | - | - |
| Critical Hdwy Stg 1  | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    | -      | - | - | -      | - | - |
| Critical Hdwy Stg 2  | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    | -      | - | - | -      | - | - |
| Follow-up Hdwy       | 3.52   | 4.02 | 3.32 | 3.52   | 4.02 | 3.32 | 2.22   | - | - | 2.22   | - | - |
| Pot Cap-1 Maneuver   | 17     | 7    | 423  | 9      | 7    | 246  | 546    | - | - | 290    | - | - |
| Stage 1              | 175    | 234  | -    | 52     | 91   | -    | -      | - | - | -      | - | - |
| Stage 2              | 220    | 90   | -    | 423    | 234  | -    | -      | - | - | -      | - | - |
| Platoon blocked, %   |        |      |      |        |      |      | -      | - |   | -      | - |   |
| Mov Cap-1 Maneuver   | ~ 14   | 6    | 423  | 7      | 6    | 246  | 546    | - | - | 290    | - | - |
| Mov Cap-2 Maneuver   | ~ 14   | 6    | -    | 7      | 6    | -    | -      | - | - | -      | - | - |
| Stage 1              | 152    | 226  | -    | 45     | 79   | -    | -      | - | - | -      | - | - |
| Stage 2              | 180    | 78   | -    | 342    | 226  | -    | -      | - | - | -      | - | - |

| Approach             | EB    | WB    | NB  | SB  |
|----------------------|-------|-------|-----|-----|
| HCM Control Delay, s | 134.8 | 124.5 | 0.4 | 0.1 |
| HCM LOS              | F     | F     |     |     |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1    | EBLn2 | WBLn1    | WBLn2 | SBL   | SBT | SBR |
|-----------------------|-------|-----|-----|----------|-------|----------|-------|-------|-----|-----|
| Capacity (veh/h)      | 546   | -   | -   | 14       | 423   | 7        | 246   | 290   | -   | -   |
| HCM Lane V/C Ratio    | 0.131 | -   | -   | 1.128    | 0.162 | 0.357    | 0.056 | 0.034 | -   | -   |
| HCM Control Delay (s) | 12.6  | -   | -   | \$ 653.3 | 15.1  | \$ 696.5 | 20.5  | 17.9  | -   | -   |
| HCM Lane LOS          | B     | -   | -   | F        | C     | F        | C     | C     | -   | -   |
| HCM 95th %tile Q(veh) | 0.4   | -   | -   | 2.5      | 0.6   | 0.7      | 0.2   | 0.1   | -   | -   |

Notes

~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Lanier Tract DRI  
4: Canterbury Road & GA 53

phase one p.m.

| Intersection                                                                                                         |        |      |      |          |       |           |        |       |      |        |      |      |
|----------------------------------------------------------------------------------------------------------------------|--------|------|------|----------|-------|-----------|--------|-------|------|--------|------|------|
| Int Delay, s/veh                                                                                                     | 3.8    |      |      |          |       |           |        |       |      |        |      |      |
|                                                                                                                      |        |      |      |          |       |           |        |       |      |        |      |      |
| Movement                                                                                                             | EBL    | EBT  | EBR  | WBL      | WBT   | WBR       | NBL    | NBT   | NBR  | SBL    | SBT  | SBR  |
| Vol, veh/h                                                                                                           | 8      | 0    | 31   | 2        | 0     | 2         | 123    | 1908  | 4    | 3      | 1268 | 15   |
| Conflicting Peds, #/hr                                                                                               | 0      | 0    | 0    | 0        | 0     | 0         | 0      | 0     | 0    | 0      | 0    | 0    |
| Sign Control                                                                                                         | Stop   | Stop | Stop | Stop     | Stop  | Stop      | Free   | Free  | Free | Free   | Free | Free |
| RT Channelized                                                                                                       | -      | -    | None | -        | -     | None      | -      | -     | None | -      | -    | None |
| Storage Length                                                                                                       | 0      | -    | 0    | 0        | -     | 0         | 0      | -     | -    | 0      | -    | 0    |
| Veh in Median Storage, #                                                                                             | -      | 0    | -    | -        | 0     | -         | -      | 0     | -    | -      | 0    | -    |
| Grade, %                                                                                                             | -      | 0    | -    | -        | 0     | -         | -      | 0     | -    | -      | 0    | -    |
| Peak Hour Factor                                                                                                     | 80     | 80   | 80   | 70       | 70    | 70        | 96     | 96    | 96   | 96     | 96   | 96   |
| Heavy Vehicles, %                                                                                                    | 2      | 2    | 2    | 2        | 2     | 2         | 2      | 2     | 2    | 2      | 2    | 2    |
| Mvmt Flow                                                                                                            | 10     | 0    | 39   | 3        | 0     | 3         | 128    | 1988  | 4    | 3      | 1321 | 16   |
|                                                                                                                      |        |      |      |          |       |           |        |       |      |        |      |      |
| Major/Minor                                                                                                          | Minor2 |      |      | Minor1   |       |           | Major1 |       |      | Major2 |      |      |
| Conflicting Flow All                                                                                                 | 2577   | 3575 | 660  | 2913     | 3573  | 996       | 1321   | 0     | 0    | 1992   | 0    | 0    |
| Stage 1                                                                                                              | 1327   | 1327 | -    | 2246     | 2246  | -         | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 1250   | 2248 | -    | 667      | 1327  | -         | -      | -     | -    | -      | -    | -    |
| Critical Hdwy                                                                                                        | 7.54   | 6.54 | 6.94 | 7.54     | 6.54  | 6.94      | 4.14   | -     | -    | 4.14   | -    | -    |
| Critical Hdwy Stg 1                                                                                                  | 6.54   | 5.54 | -    | 6.54     | 5.54  | -         | -      | -     | -    | -      | -    | -    |
| Critical Hdwy Stg 2                                                                                                  | 6.54   | 5.54 | -    | 6.54     | 5.54  | -         | -      | -     | -    | -      | -    | -    |
| Follow-up Hdwy                                                                                                       | 3.52   | 4.02 | 3.32 | 3.52     | 4.02  | 3.32      | 2.22   | -     | -    | 2.22   | -    | -    |
| Pot Cap-1 Maneuver                                                                                                   | 13     | 6    | 406  | 7        | 6     | 243       | 519    | -     | -    | 285    | -    | -    |
| Stage 1                                                                                                              | 164    | 223  | -    | 43       | 77    | -         | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 183    | 77   | -    | 414      | 223   | -         | -      | -     | -    | -      | -    | -    |
| Platoon blocked, %                                                                                                   |        |      |      |          |       |           |        | -     | -    |        | -    | -    |
| Mov Cap-1 Maneuver                                                                                                   | 10     | 4    | 406  | 5        | 4     | 243       | 519    | -     | -    | 285    | -    | -    |
| Mov Cap-2 Maneuver                                                                                                   | 10     | 4    | -    | 5        | 4     | -         | -      | -     | -    | -      | -    | -    |
| Stage 1                                                                                                              | 124    | 221  | -    | 32       | 58    | -         | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 136    | 58   | -    | 371      | 221   | -         | -      | -     | -    | -      | -    | -    |
|                                                                                                                      |        |      |      |          |       |           |        |       |      |        |      |      |
| Approach                                                                                                             | EB     |      |      | WB       |       |           | NB     |       |      | SB     |      |      |
| HCM Control Delay, s                                                                                                 | 169.2  |      |      | \$ 544.8 |       |           | 0.9    |       |      | 0      |      |      |
| HCM LOS                                                                                                              | F      |      |      | F        |       |           |        |       |      |        |      |      |
|                                                                                                                      |        |      |      |          |       |           |        |       |      |        |      |      |
| Minor Lane/Major Mvmt                                                                                                | NBL    | NBT  | NBR  | EBLn1    | EBLn2 | WBLn1     | WBLn2  | SBL   | SBT  | SBR    |      |      |
| Capacity (veh/h)                                                                                                     | 519    | -    | -    | 10       | 406   | 5         | 243    | 285   | -    | -      |      |      |
| HCM Lane V/C Ratio                                                                                                   | 0.247  | -    | -    | 1        | 0.095 | 0.571     | 0.012  | 0.011 | -    | -      |      |      |
| HCM Control Delay (s)                                                                                                | 14.2   | -    | -    | \$ 767.5 | 14.2  | \$ 1069.5 | 20     | 17.8  | -    | -      |      |      |
| HCM Lane LOS                                                                                                         | B      | -    | -    | F        | B     | F         | C      | C     | -    | -      |      |      |
| HCM 95th %tile Q(veh)                                                                                                | 1      | -    | -    | 1.9      | 0.3   | 0.9       | 0      | 0     | -    | -      |      |      |
| Notes                                                                                                                |        |      |      |          |       |           |        |       |      |        |      |      |
| ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |        |      |      |          |       |           |        |       |      |        |      |      |

Intersection

Int Delay, s/veh 0.9

| Movement                 | EBL  | EBR   | NBL  | NBT   | SBT  | SBR  |
|--------------------------|------|-------|------|-------|------|------|
| Vol, veh/h               | 1    | 52    | 95   | 2325  | 1629 | 10   |
| Conflicting Peds, #/hr   | 0    | 0     | 0    | 0     | 0    | 0    |
| Sign Control             | Stop | Stop  | Free | Free  | Free | Free |
| RT Channelized           | -    | Yield | -    | Yield | -    | None |
| Storage Length           | 0    | 0     | 200  | -     | -    | 360  |
| Veh in Median Storage, # | 0    | -     | -    | 0     | 0    | -    |
| Grade, %                 | 0    | -     | -    | 1     | 0    | -    |
| Peak Hour Factor         | 71   | 71    | 99   | 99    | 98   | 98   |
| Heavy Vehicles, %        | 0    | 0     | 0    | 0     | 1    | 0    |
| Mvmt Flow                | 1    | 73    | 96   | 2348  | 1662 | 10   |

| Major/Minor          | Minor2 |     | Major1 |   | Major2 |   |
|----------------------|--------|-----|--------|---|--------|---|
| Conflicting Flow All | 3028   | 832 | 1662   | 0 | -      | 0 |
| Stage 1              | 1662   | -   | -      | - | -      | - |
| Stage 2              | 1366   | -   | -      | - | -      | - |
| Critical Hdwy        | 6.8    | 6.9 | 4.1    | - | -      | - |
| Critical Hdwy Stg 1  | 5.8    | -   | -      | - | -      | - |
| Critical Hdwy Stg 2  | 5.8    | -   | -      | - | -      | - |
| Follow-up Hdwy       | 3.5    | 3.3 | 2.2    | - | -      | - |
| Pot Cap-1 Maneuver   | 10     | 316 | 393    | - | -      | - |
| Stage 1              | 143    | -   | -      | - | -      | - |
| Stage 2              | 206    | -   | -      | - | -      | - |
| Platoon blocked, %   |        |     |        | - | -      | - |
| Mov Cap-1 Maneuver   | 8      | 316 | 393    | - | -      | - |
| Mov Cap-2 Maneuver   | 8      | -   | -      | - | -      | - |
| Stage 1              | 143    | -   | -      | - | -      | - |
| Stage 2              | 156    | -   | -      | - | -      | - |

| Approach             | EB   | NB  | SB |
|----------------------|------|-----|----|
| HCM Control Delay, s | 29.5 | 0.7 | 0  |
| HCM LOS              | D    |     |    |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | EBLn2 | SBT | SBR |
|-----------------------|-------|-----|-------|-------|-----|-----|
| Capacity (veh/h)      | 393   | -   | 8     | 316   | -   | -   |
| HCM Lane V/C Ratio    | 0.244 | -   | 0.176 | 0.232 | -   | -   |
| HCM Control Delay (s) | 17.1  | -   | 534.2 | 19.8  | -   | -   |
| HCM Lane LOS          | C     | -   | F     | C     | -   | -   |
| HCM 95th %tile Q(veh) | 0.9   | -   | 0.4   | 0.9   | -   | -   |

## Lanier Tract DRI

## 5: GA 53 &amp; Lanier Valley Dr/Ahaluna Dr

phase one p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Volume (vph)               | 23                                                                                | 1                                                                                 | 106                                                                               | 98                                                                                | 8                                                                                 | 64                                                                                | 198                                                                                 | 1965                                                                                | 114                                                                                 | 31                                                                                  | 1366                                                                                | 3                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 2%                                                                                |                                                                                   |                                                                                   | -4%                                                                               |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 100                                                                                 |                                                                                     | 0                                                                                   | 140                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.890                                                                             |                                                                                   |                                                                                   | 0.949                                                                             |                                                                                   |                                                                                     | 0.992                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   | 0.991                                                                             |                                                                                   |                                                                                   | 0.972                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1659                                                                              | 0                                                                                 | 0                                                                                 | 1788                                                                              | 0                                                                                 | 1796                                                                                | 3563                                                                                | 0                                                                                   | 1814                                                                                | 3592                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.906                                                                             |                                                                                   |                                                                                   | 0.613                                                                             |                                                                                   | 0.117                                                                               |                                                                                     |                                                                                     | 0.049                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1517                                                                              | 0                                                                                 | 0                                                                                 | 1127                                                                              | 0                                                                                 | 221                                                                                 | 3563                                                                                | 0                                                                                   | 94                                                                                  | 3592                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 119                                                                               |                                                                                   |                                                                                   | 17                                                                                |                                                                                   |                                                                                     | 10                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 340                                                                               |                                                                                   |                                                                                   | 322                                                                               |                                                                                   |                                                                                     | 1002                                                                                |                                                                                     |                                                                                     | 1457                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.7                                                                               |                                                                                   |                                                                                   | 7.3                                                                               |                                                                                   |                                                                                     | 15.2                                                                                |                                                                                     |                                                                                     | 22.1                                                                                |                                                                                     |
| Peak Hour Factor           | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 26                                                                                | 1                                                                                 | 119                                                                               | 109                                                                               | 9                                                                                 | 71                                                                                | 206                                                                                 | 2047                                                                                | 119                                                                                 | 32                                                                                  | 1423                                                                                | 3                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 146                                                                               | 0                                                                                 | 0                                                                                 | 189                                                                               | 0                                                                                 | 206                                                                                 | 2166                                                                                | 0                                                                                   | 32                                                                                  | 1426                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 |                                                                                     | 0                                                                                   | 336                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   |                                                                                     | 0                                                                                   | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 8                                                                                 | 8                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 10.6                                                                                | 23.0                                                                                |                                                                                     | 23.0                                                                                | 23.0                                                                                |                                                                                     |

# Lanier Tract DRI

## 5: GA 53 & Lanier Valley Dr/Ahaluna Dr

phase one p.m.

|                       |  |       |     |       |       |     |       |       |     |       |       |     |
|-----------------------|------------------------------------------------------------------------------------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Lane Group            | EBL                                                                                | EBT   | EBR | WBL   | WBT   | WBR | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
| Total Split (s)       | 37.0                                                                               | 37.0  |     | 37.0  | 37.0  |     | 21.2  | 123.0 |     | 101.8 | 101.8 |     |
| Total Split (%)       | 23.1%                                                                              | 23.1% |     | 23.1% | 23.1% |     | 13.3% | 76.9% |     | 63.6% | 63.6% |     |
| Maximum Green (s)     | 30.4                                                                               | 30.4  |     | 30.4  | 30.4  |     | 15.6  | 116.9 |     | 95.7  | 95.7  |     |
| Yellow Time (s)       | 4.0                                                                                | 4.0   |     | 4.0   | 4.0   |     | 3.0   | 4.5   |     | 4.5   | 4.5   |     |
| All-Red Time (s)      | 2.6                                                                                | 2.6   |     | 2.6   | 2.6   |     | 2.6   | 1.6   |     | 1.6   | 1.6   |     |
| Lost Time Adjust (s)  |                                                                                    | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Lost Time (s)   |                                                                                    | 6.6   |     |       | 6.6   |     | 5.6   | 6.1   |     | 6.1   | 6.1   |     |
| Lead/Lag              |                                                                                    |       |     |       |       |     | Lead  |       |     | Lag   | Lag   |     |
| Lead-Lag Optimize?    |                                                                                    |       |     |       |       |     | Yes   |       |     | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0                                                                                | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode           | None                                                                               | None  |     | None  | None  |     | None  | C-Max |     | C-Max | C-Max |     |
| Act Effect Green (s)  |                                                                                    | 27.1  |     |       | 27.1  |     | 120.7 | 120.2 |     | 102.6 | 102.6 |     |
| Actuated g/C Ratio    |                                                                                    | 0.17  |     |       | 0.17  |     | 0.75  | 0.75  |     | 0.64  | 0.64  |     |
| v/c Ratio             |                                                                                    | 0.41  |     |       | 0.92  |     | 0.73  | 0.81  |     | 0.53  | 0.62  |     |
| Control Delay         |                                                                                    | 17.5  |     |       | 104.1 |     | 30.2  | 14.3  |     | 56.7  | 19.5  |     |
| Queue Delay           |                                                                                    | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay           |                                                                                    | 17.5  |     |       | 104.1 |     | 30.2  | 14.3  |     | 56.7  | 19.5  |     |
| LOS                   |                                                                                    | B     |     |       | F     |     | C     | B     |     | E     | B     |     |
| Approach Delay        |                                                                                    | 17.5  |     |       | 104.1 |     |       | 15.7  |     |       | 20.4  |     |
| Approach LOS          |                                                                                    | B     |     |       | F     |     |       | B     |     |       | C     |     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 129 (81%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.92

Intersection Signal Delay: 21.4

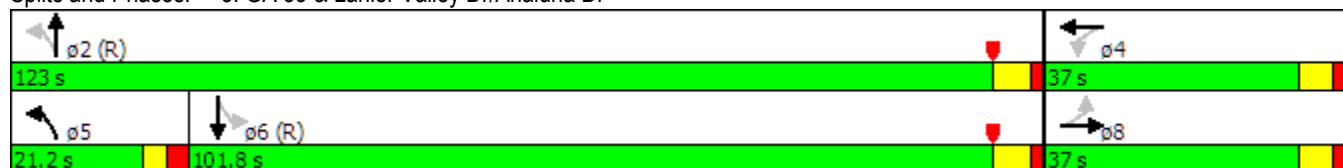
Intersection LOS: C

Intersection Capacity Utilization 94.2%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 5: GA 53 & Lanier Valley Dr/Ahaluna Dr





## Lanier Tract DRI

## 6: 53-Dawsonville Hwy &amp; Academy Sports

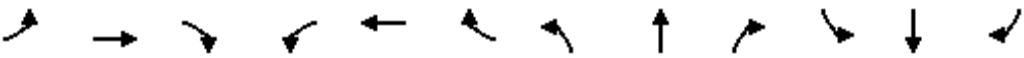
phase one p.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |  |  |  |  |  |  |  |
| Volume (vph)               | 14                                                                                | 3                                                                                 | 66                                                                                | 130                                                                               | 8                                                                                 | 46                                                                                | 96                                                                                  | 2066                                                                                | 152                                                                                 | 21                                                                                  | 1421                                                                                | 30                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 4%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 70                                                                                | 200                                                                                 |                                                                                     | 170                                                                                 | 190                                                                                 |                                                                                     | 360                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1805                                                                              | 1900                                                                              | 1615                                                                              | 1769                                                                              | 1862                                                                              | 1583                                                                              | 1796                                                                                | 3592                                                                                | 1607                                                                                | 1805                                                                                | 3574                                                                                | 1615                                                                                |
| Flt Permitted              | 0.751                                                                             |                                                                                   |                                                                                   | 0.756                                                                             |                                                                                   |                                                                                   | 0.123                                                                               |                                                                                     |                                                                                     | 0.039                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1427                                                                              | 1900                                                                              | 1615                                                                              | 1408                                                                              | 1862                                                                              | 1583                                                                              | 233                                                                                 | 3592                                                                                | 1607                                                                                | 74                                                                                  | 3574                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 69                                                                                |                                                                                   |                                                                                   | 63                                                                                |                                                                                     |                                                                                     | 66                                                                                  |                                                                                     |                                                                                     | 64                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 262                                                                               |                                                                                   |                                                                                   | 246                                                                               |                                                                                   |                                                                                     | 1836                                                                                |                                                                                     |                                                                                     | 685                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.1                                                                               |                                                                                   |                                                                                   | 6.7                                                                               |                                                                                   |                                                                                     | 27.8                                                                                |                                                                                     |                                                                                     | 10.4                                                                                |                                                                                     |
| Peak Hour Factor           | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.80                                                                              | 0.80                                                                              | 0.80                                                                              | 0.98                                                                                | 0.98                                                                                | 0.98                                                                                | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 15                                                                                | 3                                                                                 | 69                                                                                | 162                                                                               | 10                                                                                | 58                                                                                | 98                                                                                  | 2108                                                                                | 155                                                                                 | 22                                                                                  | 1465                                                                                | 31                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 15                                                                                | 3                                                                                 | 69                                                                                | 162                                                                               | 10                                                                                | 58                                                                                | 98                                                                                  | 2108                                                                                | 155                                                                                 | 22                                                                                  | 1465                                                                                | 31                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 2                                                                                   |                                                                                     | 2                                                                                   | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 42.0                                                                              | 42.0                                                                              | 42.0                                                                              | 42.4                                                                              | 42.4                                                                              | 42.4                                                                              | 11.4                                                                                | 30.3                                                                                | 30.3                                                                                | 11.0                                                                                | 29.3                                                                                | 29.3                                                                                |

# Lanier Tract DRI

## 6: 53-Dawsonville Hwy & Academy Sports

phase one p.m.

|                         |  |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 42.4                                                                               | 42.4  | 42.4  | 42.4  | 42.4  | 42.4  | 16.2  | 106.6 | 106.6 | 11.0  | 101.4 | 101.4 |
| Total Split (%)         | 26.5%                                                                              | 26.5% | 26.5% | 26.5% | 26.5% | 26.5% | 10.1% | 66.6% | 66.6% | 6.9%  | 63.4% | 63.4% |
| Maximum Green (s)       | 36.0                                                                               | 36.0  | 36.0  | 36.0  | 36.0  | 36.0  | 9.8   | 100.4 | 100.4 | 5.0   | 95.2  | 95.2  |
| Yellow Time (s)         | 3.4                                                                                | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 4.3   | 4.3   | 3.0   | 4.3   | 4.3   |
| All-Red Time (s)        | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 1.9   | 1.9   | 3.0   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.4                                                                                | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.2   | 6.2   | 6.0   | 6.2   | 6.2   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           | 4.0                                                                                | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 23.0                                                                               | 23.0  | 23.0  | 32.0  | 32.0  | 32.0  |       | 20.0  | 20.0  |       | 19.0  | 19.0  |
| Pedestrian Calls (#/hr) | 0                                                                                  | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    | 23.7                                                                               | 23.7  | 23.7  | 23.7  | 23.7  | 23.7  | 121.3 | 116.4 | 116.4 | 115.8 | 109.6 | 109.6 |
| Actuated g/C Ratio      | 0.15                                                                               | 0.15  | 0.15  | 0.15  | 0.15  | 0.15  | 0.76  | 0.73  | 0.73  | 0.72  | 0.68  | 0.68  |
| v/c Ratio               | 0.07                                                                               | 0.01  | 0.23  | 0.78  | 0.04  | 0.20  | 0.39  | 0.81  | 0.13  | 0.19  | 0.60  | 0.03  |
| Control Delay           | 55.8                                                                               | 53.3  | 13.0  | 89.1  | 54.6  | 11.7  | 11.7  | 16.7  | 7.3   | 10.0  | 12.0  | 0.0   |
| Queue Delay             | 0.0                                                                                | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.1   | 0.0   |
| Total Delay             | 55.8                                                                               | 53.3  | 13.0  | 89.1  | 54.6  | 11.7  | 11.7  | 16.7  | 7.3   | 10.0  | 12.1  | 0.0   |
| LOS                     | E                                                                                  | D     | B     | F     | D     | B     | B     | B     | A     | B     | B     | A     |
| Approach Delay          |                                                                                    | 21.8  |       |       | 68.1  |       |       | 15.9  |       |       | 11.8  |       |
| Approach LOS            |                                                                                    | C     |       |       | E     |       |       | B     |       |       | B     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 120 (75%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 145

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 17.4

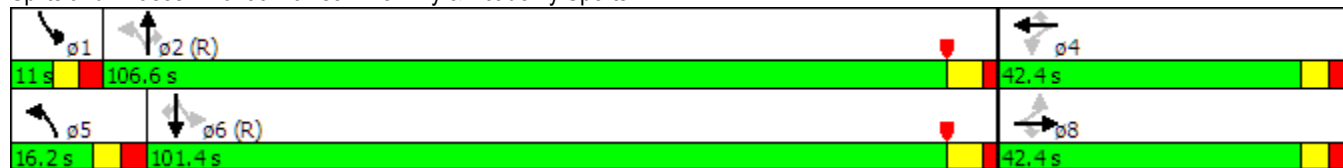
Intersection LOS: B

Intersection Capacity Utilization 90.6%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 6: 53-Dawsonville Hwy & Academy Sports



## Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 &amp; McEver Road/McEver

phase one p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |                                                                                   |   |  |  |  |  |  |
| Volume (vph)               | 967                                                                               | 235                                                                               | 426                                                                               | 96                                                                                | 100                                                                               | 93                                                                                | 478                                                                                 | 1585                                                                                | 51                                                                                  | 71                                                                                  | 1199                                                                                | 562                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 1%                                                                                |                                                                                   |                                                                                   | 5%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 180                                                                               |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 310                                                                                 |                                                                                     | 185                                                                                 | 255                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 50                                                                                |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.951                                                                             | 0.850                                                                             |                                                                                   | 0.928                                                                             |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 3484                                                                              | 1708                                                                              | 1527                                                                              | 1760                                                                              | 1719                                                                              | 0                                                                                 | 3484                                                                                | 3592                                                                                | 1607                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   | 0.468                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 3484                                                                              | 1708                                                                              | 1527                                                                              | 867                                                                               | 1719                                                                              | 0                                                                                 | 3484                                                                                | 3592                                                                                | 1607                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 18                                                                                | 308                                                                               |                                                                                   | 28                                                                                |                                                                                   |                                                                                     |                                                                                     | 172                                                                                 |                                                                                     |                                                                                     | 315                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 580                                                                               |                                                                                   |                                                                                   | 331                                                                               |                                                                                   |                                                                                     | 921                                                                                 |                                                                                     |                                                                                     | 1504                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 8.8                                                                               |                                                                                   |                                                                                   | 9.0                                                                               |                                                                                   |                                                                                     | 14.0                                                                                |                                                                                     |                                                                                     | 22.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.86                                                                              | 0.86                                                                              | 0.86                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 1018                                                                              | 247                                                                               | 448                                                                               | 112                                                                               | 116                                                                               | 108                                                                               | 493                                                                                 | 1634                                                                                | 53                                                                                  | 78                                                                                  | 1318                                                                                | 618                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   | 27%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 1018                                                                              | 368                                                                               | 327                                                                               | 112                                                                               | 224                                                                               | 0                                                                                 | 493                                                                                 | 1634                                                                                | 53                                                                                  | 78                                                                                  | 1318                                                                                | 618                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 24                                                                                |                                                                                   |                                                                                   | 24                                                                                |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                             | NA                                                                                |                                                                                   | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 8                                                                                 |                                                                                   | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 8                                                                                 | 8                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 13.2                                                                              | 50.2                                                                              | 50.2                                                                              | 11.6                                                                              | 48.2                                                                              |                                                                                   | 13.4                                                                                | 35.6                                                                                | 35.6                                                                                | 12.9                                                                                | 44.6                                                                                | 44.6                                                                                |

Lanier Tract DRI

8: Dawsonville Highway/GA 53 & McEver Road/McEver

phase one p.m.

| Lane Group              | EBL   | EBT   | EBR   | WBL  | WBT   | WBR | NBL   | NBT   | NBR   | SBL  | SBT   | SBR   |
|-------------------------|-------|-------|-------|------|-------|-----|-------|-------|-------|------|-------|-------|
| Total Split (s)         | 35.0  | 69.5  | 69.5  | 13.7 | 48.2  |     | 22.0  | 63.8  | 63.8  | 13.0 | 54.8  | 54.8  |
| Total Split (%)         | 21.9% | 43.4% | 43.4% | 8.6% | 30.1% |     | 13.8% | 39.9% | 39.9% | 8.1% | 34.3% | 34.3% |
| Maximum Green (s)       | 27.7  | 62.2  | 62.2  | 7.2  | 40.9  |     | 14.5  | 57.2  | 57.2  | 5.8  | 48.2  | 48.2  |
| Yellow Time (s)         | 4.3   | 4.3   | 4.3   | 3.5  | 4.3   |     | 4.5   | 4.4   | 4.4   | 4.2  | 4.4   | 4.4   |
| All-Red Time (s)        | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 2.2   | 2.2   | 3.0  | 2.2   | 2.2   |
| Lost Time Adjust (s)    | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Lost Time (s)     | 7.3   | 7.3   | 7.3   | 6.5  | 7.3   |     | 7.5   | 6.6   | 6.6   | 7.2  | 6.6   | 6.6   |
| Lead/Lag                | Lead  | Lag   | Lag   | Lead | Lag   |     | Lag   | Lag   | Lag   | Lead | Lead  | Lead  |
| Lead-Lag Optimize?      | Yes   | Yes   | Yes   | Yes  | Yes   |     | Yes   | Yes   | Yes   | Yes  | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   |
| Recall Mode             | None  | None  | None  | None | None  |     | None  | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s)           |       | 4.0   | 4.0   |      | 4.0   |     |       | 4.0   | 4.0   |      | 4.0   | 4.0   |
| Flash Dont Walk (s)     |       | 38.0  | 38.0  |      | 36.0  |     |       | 25.0  | 25.0  |      | 34.0  | 34.0  |
| Pedestrian Calls (#/hr) |       | 0     | 0     |      | 0     |     |       | 0     | 0     |      | 0     | 0     |
| Act Effect Green (s)    | 27.7  | 45.2  | 45.2  | 31.9 | 23.9  |     | 14.5  | 64.6  | 64.6  | 15.4 | 65.2  | 65.2  |
| Actuated g/C Ratio      | 0.17  | 0.28  | 0.28  | 0.20 | 0.15  |     | 0.09  | 0.40  | 0.40  | 0.10 | 0.41  | 0.41  |
| v/c Ratio               | 1.69  | 0.74  | 0.50  | 0.53 | 0.80  |     | 1.57  | 1.13  | 0.07  | 0.45 | 0.90  | 0.73  |
| Control Delay           | 354.5 | 58.6  | 7.9   | 46.9 | 77.3  |     | 314.1 | 120.2 | 0.1   | 67.2 | 67.6  | 40.5  |
| Queue Delay             | 0.0   | 24.1  | 1.7   | 21.7 | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Delay             | 354.5 | 82.7  | 9.6   | 68.5 | 77.3  |     | 314.1 | 120.2 | 0.1   | 67.2 | 67.6  | 40.5  |
| LOS                     | F     | F     | A     | E    | E     |     | F     | F     | A     | E    | E     | D     |
| Approach Delay          |       | 230.3 |       |      | 74.4  |     |       | 161.1 |       |      | 59.3  |       |
| Approach LOS            |       | F     |       |      | E     |     |       | F     |       |      | E     |       |

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 52 (33%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.69

Intersection Signal Delay: 142.6

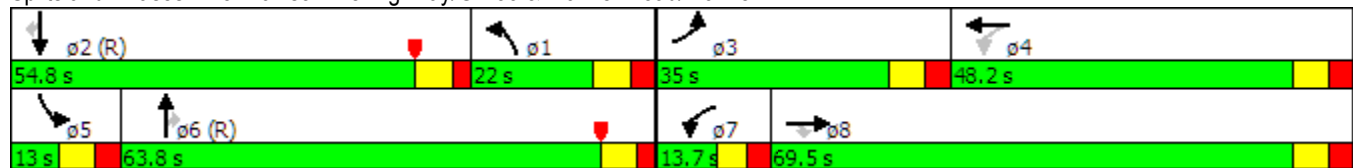
Intersection LOS: F

Intersection Capacity Utilization 110.2%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 8: Dawsonville Highway/GA 53 & McEver Road/McEver



## Lanier Tract DRI

## 9: Dawsonville Highway &amp; Greenhill Circle/Greenhill Circle

phase one p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 146                                                                               | 10                                                                                | 152                                                                               | 66                                                                                | 22                                                                                | 42                                                                                | 274                                                                                 | 2012                                                                                | 77                                                                                  | 44                                                                                  | 1600                                                                                | 59                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 3%                                                                                |                                                                                   |                                                                                   | 7%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 190                                                                                 |                                                                                     | 190                                                                                 | 185                                                                                 |                                                                                     | 100                                                                                 |
| Storage Lanes              | 0                                                                                 |                                                                                   | 1                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              |                                                                                   | 0.955                                                                             |                                                                                   |                                                                                   | 0.964                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1787                                                                              | 1591                                                                              | 0                                                                                 | 1767                                                                              | 1558                                                                              | 1796                                                                                | 3592                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   | 0.591                                                                             |                                                                                   |                                                                                   | 0.482                                                                             |                                                                                   | 0.043                                                                               |                                                                                     |                                                                                     | 0.044                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1106                                                                              | 1591                                                                              | 0                                                                                 | 884                                                                               | 1558                                                                              | 81                                                                                  | 3592                                                                                | 1607                                                                                | 84                                                                                  | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 167                                                                               |                                                                                   |                                                                                   | 95                                                                                |                                                                                     |                                                                                     | 54                                                                                  |                                                                                     |                                                                                     | 95                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 288                                                                               |                                                                                   |                                                                                   | 254                                                                               |                                                                                   |                                                                                     | 778                                                                                 |                                                                                     |                                                                                     | 921                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.9                                                                               |                                                                                   |                                                                                   | 6.9                                                                               |                                                                                   |                                                                                     | 11.8                                                                                |                                                                                     |                                                                                     | 14.0                                                                                |                                                                                     |
| Peak Hour Factor           | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.78                                                                              | 0.78                                                                              | 0.78                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 160                                                                               | 11                                                                                | 167                                                                               | 85                                                                                | 28                                                                                | 54                                                                                | 282                                                                                 | 2074                                                                                | 79                                                                                  | 46                                                                                  | 1684                                                                                | 62                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 171                                                                               | 167                                                                               | 0                                                                                 | 113                                                                               | 54                                                                                | 282                                                                                 | 2074                                                                                | 79                                                                                  | 46                                                                                  | 1684                                                                                | 62                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.02                                                                              | 1.02                                                                              | 1.02                                                                              | 1.05                                                                              | 1.05                                                                              | 1.05                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              | 23.0                                                                              | 39.9                                                                              | 39.9                                                                              | 39.9                                                                              | 11.0                                                                                | 28.0                                                                                | 28.0                                                                                | 10.0                                                                                | 36.0                                                                                | 36.0                                                                                |

# Lanier Tract DRI

## 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle

phase one p.m.

|                         |  |       |       |       |       |       |       |       |       |      |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL  | SBT   | SBR   |
| Total Split (s)         | 39.9                                                                               | 39.9  | 39.9  | 39.9  | 39.9  | 39.9  | 31.0  | 110.1 | 110.1 | 10.0 | 89.1  | 89.1  |
| Total Split (%)         | 24.9%                                                                              | 24.9% | 24.9% | 24.9% | 24.9% | 24.9% | 19.4% | 68.8% | 68.8% | 6.3% | 55.7% | 55.7% |
| Maximum Green (s)       | 34.0                                                                               | 34.0  | 34.0  | 34.0  | 34.0  | 34.0  | 25.0  | 104.1 | 104.1 | 5.0  | 83.1  | 83.1  |
| Yellow Time (s)         | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 4.4   | 4.4   | 3.5  | 4.4   | 4.4   |
| All-Red Time (s)        | 2.9                                                                                | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 3.0   | 1.6   | 1.6   | 1.5  | 1.6   | 1.6   |
| Lost Time Adjust (s)    |                                                                                    | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Lost Time (s)     |                                                                                    | 5.9   | 5.9   |       | 5.9   | 5.9   | 6.0   | 6.0   | 6.0   | 5.0  | 6.0   | 6.0   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes  | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s)           |                                                                                    |       |       | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |      | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    |       |       | 30.0  | 30.0  | 30.0  |       | 18.0  | 18.0  |      | 26.0  | 26.0  |
| Pedestrian Calls (#/hr) |                                                                                    |       |       | 0     | 0     | 0     |       | 0     | 0     |      | 0     | 0     |
| Act Effect Green (s)    |                                                                                    | 28.1  | 28.1  |       | 28.1  | 28.1  | 120.0 | 111.5 | 111.5 | 96.9 | 90.3  | 90.3  |
| Actuated g/C Ratio      |                                                                                    | 0.18  | 0.18  |       | 0.18  | 0.18  | 0.75  | 0.70  | 0.70  | 0.61 | 0.56  | 0.56  |
| v/c Ratio               |                                                                                    | 0.88  | 0.40  |       | 0.73  | 0.15  | 0.90  | 0.83  | 0.07  | 0.41 | 0.83  | 0.07  |
| Control Delay           |                                                                                    | 103.0 | 9.8   |       | 87.7  | 1.7   | 57.3  | 30.1  | 5.4   | 24.1 | 57.7  | 11.5  |
| Queue Delay             |                                                                                    | 0.0   | 5.5   |       | 87.6  | 0.0   | 0.0   | 47.1  | 0.0   | 0.0  | 1.7   | 0.0   |
| Total Delay             |                                                                                    | 103.0 | 15.3  |       | 175.3 | 1.7   | 57.3  | 77.2  | 5.4   | 24.1 | 59.4  | 11.5  |
| LOS                     |                                                                                    | F     | B     |       | F     | A     | E     | E     | A     | C    | E     | B     |
| Approach Delay          |                                                                                    | 59.7  |       |       | 119.2 |       |       | 72.6  |       |      | 56.9  |       |
| Approach LOS            |                                                                                    | E     |       |       | F     |       |       | E     |       |      | E     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 67.3

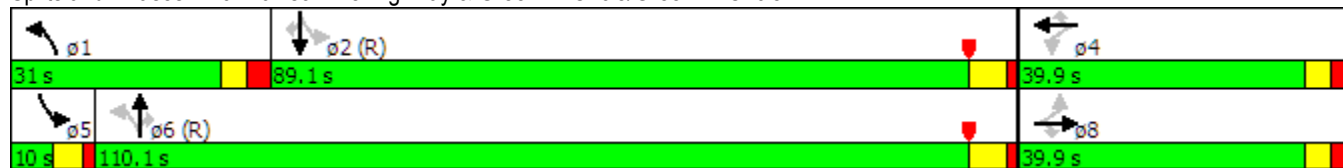
Intersection LOS: E

Intersection Capacity Utilization 89.6%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle



## Lanier Tract DRI

## 10: Dawsonville Highway &amp; Shallowford Rd/Best Buy

phase one p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 590                                                                               | 42                                                                                | 29                                                                                | 40                                                                                | 30                                                                                | 8                                                                                 | 44                                                                                  | 1873                                                                                | 126                                                                                 | 8                                                                                   | 1331                                                                                | 525                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | -1%                                                                               |                                                                                   |                                                                                   | 10%                                                                               |                                                                                   |                                                                                     | -4%                                                                                 |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 350                                                                               |                                                                                   | 350                                                                               | 0                                                                                 |                                                                                   | 0                                                                                 | 350                                                                                 |                                                                                     | 150                                                                                 | 265                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 100                                                                               |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             | 0.958                                                                             |                                                                                   |                                                                                   | 0.972                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1723                                                                              | 1738                                                                              | 1623                                                                              | 0                                                                                 | 1754                                                                              | 1534                                                                              | 1841                                                                                | 3682                                                                                | 1647                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             | 0.958                                                                             |                                                                                   |                                                                                   | 0.972                                                                             |                                                                                   | 0.074                                                                               |                                                                                     |                                                                                     | 0.046                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1723                                                                              | 1738                                                                              | 1623                                                                              | 0                                                                                 | 1754                                                                              | 1534                                                                              | 143                                                                                 | 3682                                                                                | 1647                                                                                | 88                                                                                  | 3628                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 106                                                                               |                                                                                   |                                                                                   | 111                                                                               |                                                                                     |                                                                                     | 65                                                                                  |                                                                                     |                                                                                     | 318                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 653                                                                               |                                                                                   |                                                                                   | 178                                                                               |                                                                                   |                                                                                     | 1046                                                                                |                                                                                     |                                                                                     | 778                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 9.9                                                                               |                                                                                   |                                                                                   | 4.9                                                                               |                                                                                   |                                                                                     | 15.8                                                                                |                                                                                     |                                                                                     | 11.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.94                                                                                | 0.94                                                                                | 0.94                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 656                                                                               | 47                                                                                | 32                                                                                | 45                                                                                | 34                                                                                | 9                                                                                 | 47                                                                                  | 1993                                                                                | 134                                                                                 | 9                                                                                   | 1463                                                                                | 577                                                                                 |
| Shared Lane Traffic (%)    | 47%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 348                                                                               | 355                                                                               | 32                                                                                | 0                                                                                 | 79                                                                                | 9                                                                                 | 47                                                                                  | 1993                                                                                | 134                                                                                 | 9                                                                                   | 1463                                                                                | 577                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 0.99                                                                              | 0.99                                                                              | 0.99                                                                              | 1.07                                                                              | 1.07                                                                              | 1.07                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Split                                                                             | NA                                                                                | Perm                                                                              | Split                                                                             | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | Perm                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 3                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 3                                                                                 | 3                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 36.7                                                                              | 36.7                                                                              | 36.7                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                                | 28.8                                                                                | 28.8                                                                                | 30.8                                                                                | 30.8                                                                                | 30.8                                                                                |

# Lanier Tract DRI

## 10: Dawsonville Highway & Shallowford Rd/Best Buy

phase one p.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Total Split (s)         | 36.7                                                                              | 36.7                                                                              | 36.7                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                               | 84.4                                                                                | 84.4                                                                                | 73.6                                                                                | 73.6                                                                                | 73.6                                                                                |
| Total Split (%)         | 22.9%                                                                             | 22.9%                                                                             | 22.9%                                                                             | 24.3%                                                                             | 24.3%                                                                             | 24.3%                                                                             | 6.8%                                                                               | 52.8%                                                                               | 52.8%                                                                               | 46.0%                                                                               | 46.0%                                                                               | 46.0%                                                                               |
| Maximum Green (s)       | 30.0                                                                              | 30.0                                                                              | 30.0                                                                              | 33.0                                                                              | 33.0                                                                              | 33.0                                                                              | 5.0                                                                                | 77.6                                                                                | 77.6                                                                                | 66.8                                                                                | 66.8                                                                                | 66.8                                                                                |
| Yellow Time (s)         | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 4.9                                                                                 | 4.9                                                                                 | 4.9                                                                                 | 4.9                                                                                 | 4.9                                                                                 |
| All-Red Time (s)        | 2.2                                                                               | 2.2                                                                               | 2.2                                                                               | 2.9                                                                               | 2.9                                                                               | 2.9                                                                               | 2.8                                                                                | 1.9                                                                                 | 1.9                                                                                 | 1.9                                                                                 | 1.9                                                                                 | 1.9                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.7                                                                               | 6.7                                                                               | 6.7                                                                               |                                                                                   | 5.9                                                                               | 5.9                                                                               | 5.8                                                                                | 6.8                                                                                 | 6.8                                                                                 | 6.8                                                                                 | 6.8                                                                                 | 6.8                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lag                                                                               | Lead                                                                               |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 | Lag                                                                                 |
| Lead-Lag Optimize?      | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                                |                                                                                     |                                                                                     | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                               | C-Min                                                                               | C-Min                                                                               | C-Min                                                                               | C-Min                                                                               | C-Min                                                                               |
| Walk Time (s)           | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                    | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |
| Flash Dont Walk (s)     | 26.0                                                                              | 26.0                                                                              | 26.0                                                                              | 29.0                                                                              | 29.0                                                                              | 29.0                                                                              |                                                                                    | 18.0                                                                                | 18.0                                                                                | 20.0                                                                                | 20.0                                                                                | 20.0                                                                                |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Act Effect Green (s)    | 30.0                                                                              | 30.0                                                                              | 30.0                                                                              |                                                                                   | 12.6                                                                              | 12.6                                                                              | 99.0                                                                               | 98.0                                                                                | 98.0                                                                                | 87.4                                                                                | 87.4                                                                                | 87.4                                                                                |
| Actuated g/C Ratio      | 0.19                                                                              | 0.19                                                                              | 0.19                                                                              |                                                                                   | 0.08                                                                              | 0.08                                                                              | 0.62                                                                               | 0.61                                                                                | 0.61                                                                                | 0.55                                                                                | 0.55                                                                                | 0.55                                                                                |
| v/c Ratio               | 1.08                                                                              | 1.09                                                                              | 0.08                                                                              |                                                                                   | 0.57                                                                              | 0.04                                                                              | 0.29                                                                               | 0.88                                                                                | 0.13                                                                                | 0.19                                                                                | 0.74                                                                                | 0.56                                                                                |
| Control Delay           | 131.3                                                                             | 135.2                                                                             | 0.4                                                                               |                                                                                   | 86.5                                                                              | 0.4                                                                               | 17.3                                                                               | 32.6                                                                                | 7.4                                                                                 | 56.8                                                                                | 55.1                                                                                | 33.4                                                                                |
| Queue Delay             | 1.2                                                                               | 1.3                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 46.8                                                                                | 0.0                                                                                 | 0.0                                                                                 | 23.5                                                                                | 0.8                                                                                 |
| Total Delay             | 132.5                                                                             | 136.5                                                                             | 0.4                                                                               |                                                                                   | 86.5                                                                              | 0.4                                                                               | 17.3                                                                               | 79.4                                                                                | 7.4                                                                                 | 56.8                                                                                | 78.7                                                                                | 34.2                                                                                |
| LOS                     | F                                                                                 | F                                                                                 | A                                                                                 |                                                                                   | F                                                                                 | A                                                                                 | B                                                                                  | E                                                                                   | A                                                                                   | E                                                                                   | E                                                                                   | C                                                                                   |
| Approach Delay          |                                                                                   | 128.7                                                                             |                                                                                   |                                                                                   | 77.7                                                                              |                                                                                   |                                                                                    | 73.6                                                                                |                                                                                     |                                                                                     | 66.1                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | F                                                                                 |                                                                                   |                                                                                   | E                                                                                 |                                                                                   |                                                                                    | E                                                                                   |                                                                                     |                                                                                     | E                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 91 (57%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.09

Intersection Signal Delay: 78.6

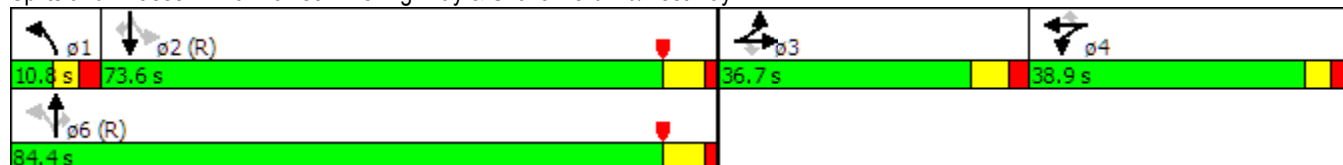
Intersection LOS: E

Intersection Capacity Utilization 89.6%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 10: Dawsonville Highway & Shallowford Rd/Best Buy





## Appendix F

### Future Phase Two Intersection Analysis

Lanier Tract DRI  
1: Sportsman Club Road & Strickland Drive

phase two a.m.

| Intersection             |        |          |      |        |       |      |
|--------------------------|--------|----------|------|--------|-------|------|
| Int Delay, s/veh         | 4.2    |          |      |        |       |      |
|                          |        |          |      |        |       |      |
| Movement                 | WBL    | WBR      | NBT  | NBR    | SBL   | SBT  |
| Vol, veh/h               | 30     | 0        | 7    | 11     | 0     | 25   |
| Conflicting Peds, #/hr   | 0      | 0        | 0    | 0      | 0     | 0    |
| Sign Control             | Stop   | Stop     | Free | Free   | Free  | Free |
| RT Channelized           | -      | None     | -    | None   | -     | None |
| Storage Length           | 0      | -        | -    | -      | -     | -    |
| Veh in Median Storage, # | 0      | -        | 0    | -      | -     | 0    |
| Grade, %                 | 0      | -        | 0    | -      | -     | 0    |
| Peak Hour Factor         | 50     | 50       | 58   | 58     | 64    | 64   |
| Heavy Vehicles, %        | 2      | 2        | 2    | 2      | 2     | 2    |
| Mvmt Flow                | 60     | 0        | 12   | 19     | 0     | 39   |
|                          |        |          |      |        |       |      |
| Major/Minor              | Minor1 | Major1   |      | Major2 |       |      |
| Conflicting Flow All     | 61     | 22       | 0    | 0      | 31    | 0    |
| Stage 1                  | 22     | -        | -    | -      | -     | -    |
| Stage 2                  | 39     | -        | -    | -      | -     | -    |
| Critical Hdwy            | 6.42   | 6.22     | -    | -      | 4.12  | -    |
| Critical Hdwy Stg 1      | 5.42   | -        | -    | -      | -     | -    |
| Critical Hdwy Stg 2      | 5.42   | -        | -    | -      | -     | -    |
| Follow-up Hdwy           | 3.518  | 3.318    | -    | -      | 2.218 | -    |
| Pot Cap-1 Maneuver       | 945    | 1055     | -    | -      | 1582  | -    |
| Stage 1                  | 1001   | -        | -    | -      | -     | -    |
| Stage 2                  | 983    | -        | -    | -      | -     | -    |
| Platoon blocked, %       |        |          | -    | -      |       | -    |
| Mov Cap-1 Maneuver       | 945    | 1055     | -    | -      | 1582  | -    |
| Mov Cap-2 Maneuver       | 945    | -        | -    | -      | -     | -    |
| Stage 1                  | 1001   | -        | -    | -      | -     | -    |
| Stage 2                  | 983    | -        | -    | -      | -     | -    |
|                          |        |          |      |        |       |      |
| Approach                 | WB     | NB       |      | SB     |       |      |
| HCM Control Delay, s     | 9.1    | 0        |      | 0      |       |      |
| HCM LOS                  | A      |          |      |        |       |      |
|                          |        |          |      |        |       |      |
| Minor Lane/Major Mvmt    | NBT    | NBRWBLn1 | SBL  | SBT    |       |      |
| Capacity (veh/h)         | -      | - 945    | 1582 | -      |       |      |
| HCM Lane V/C Ratio       | -      | - 0.063  | -    | -      |       |      |
| HCM Control Delay (s)    | -      | - 9.1    | 0    | -      |       |      |
| HCM Lane LOS             | -      | - A      | A    | -      |       |      |
| HCM 95th %tile Q(veh)    | -      | - 0.2    | 0    | -      |       |      |

Lanier Tract DRI  
2: GA 53 & Sportsman Club Road

phase two a.m.

| Intersection               |        |                        |      |                            |       |      |                                |          |      |          |      |      |
|----------------------------|--------|------------------------|------|----------------------------|-------|------|--------------------------------|----------|------|----------|------|------|
| Int Delay, s/veh           | 23.7   |                        |      |                            |       |      |                                |          |      |          |      |      |
|                            |        |                        |      |                            |       |      |                                |          |      |          |      |      |
| Movement                   | EBL    | EBT                    | EBR  | WBL                        | WBT   | WBR  | NBL                            | NBT      | NBR  | SBL      | SBT  | SBR  |
| Vol, veh/h                 | 14     | 1899                   | 0    | 5                          | 850   | 15   | 0                              | 0        | 0    | 41       | 0    | 23   |
| Conflicting Peds, #/hr     | 0      | 0                      | 0    | 0                          | 0     | 0    | 0                              | 0        | 0    | 0        | 0    | 0    |
| Sign Control               | Free   | Free                   | Free | Free                       | Free  | Free | Stop                           | Stop     | Stop | Stop     | Stop | Stop |
| RT Channelized             | -      | -                      | None | -                          | -     | None | -                              | -        | None | -        | -    | None |
| Storage Length             | 0      | -                      | -    | 0                          | -     | -    | -                              | -        | -    | -        | -    | -    |
| Veh in Median Storage, #   | -      | 0                      | -    | -                          | 0     | -    | -                              | 0        | -    | -        | 0    | -    |
| Grade, %                   | -      | 0                      | -    | -                          | 0     | -    | -                              | 0        | -    | -        | 0    | -    |
| Peak Hour Factor           | 86     | 86                     | 86   | 84                         | 84    | 84   | 92                             | 92       | 92   | 70       | 70   | 70   |
| Heavy Vehicles, %          | 2      | 2                      | 2    | 2                          | 2     | 2    | 2                              | 2        | 2    | 2        | 2    | 2    |
| Mvmt Flow                  | 16     | 2208                   | 0    | 6                          | 1012  | 18   | 0                              | 0        | 0    | 59       | 0    | 33   |
|                            |        |                        |      |                            |       |      |                                |          |      |          |      |      |
| Major/Minor                | Major1 |                        |      | Major2                     |       |      | Minor1                         |          |      | Minor2   |      |      |
| Conflicting Flow All       | 1030   | 0                      | 0    | 2208                       | 0     | 0    | 2759                           | 3283     | 1104 | 2170     | 3274 | 515  |
| Stage 1                    | -      | -                      | -    | -                          | -     | -    | 2241                           | 2241     | -    | 1033     | 1033 | -    |
| Stage 2                    | -      | -                      | -    | -                          | -     | -    | 518                            | 1042     | -    | 1137     | 2241 | -    |
| Critical Hdwy              | 4.14   | -                      | -    | 4.14                       | -     | -    | 7.54                           | 6.54     | 6.94 | 7.54     | 6.54 | 6.94 |
| Critical Hdwy Stg 1        | -      | -                      | -    | -                          | -     | -    | 6.54                           | 5.54     | -    | 6.54     | 5.54 | -    |
| Critical Hdwy Stg 2        | -      | -                      | -    | -                          | -     | -    | 6.54                           | 5.54     | -    | 6.54     | 5.54 | -    |
| Follow-up Hdwy             | 2.22   | -                      | -    | 2.22                       | -     | -    | 3.52                           | 4.02     | 3.32 | 3.52     | 4.02 | 3.32 |
| Pot Cap-1 Maneuver         | 670    | -                      | -    | 234                        | -     | -    | 9                              | 9        | 206  | ~ 26     | 9    | 505  |
| Stage 1                    | -      | -                      | -    | -                          | -     | -    | 43                             | 78       | -    | 249      | 308  | -    |
| Stage 2                    | -      | -                      | -    | -                          | -     | -    | 509                            | 305      | -    | 215      | 78   | -    |
| Platoon blocked, %         |        | -                      | -    |                            | -     | -    |                                |          |      |          |      |      |
| Mov Cap-1 Maneuver         | 670    | -                      | -    | 234                        | -     | -    | 8                              | 9        | 206  | ~ 25     | 9    | 505  |
| Mov Cap-2 Maneuver         | -      | -                      | -    | -                          | -     | -    | 8                              | 9        | -    | ~ 25     | 9    | -    |
| Stage 1                    | -      | -                      | -    | -                          | -     | -    | 42                             | 76       | -    | 243      | 300  | -    |
| Stage 2                    | -      | -                      | -    | -                          | -     | -    | 464                            | 297      | -    | 210      | 76   | -    |
|                            |        |                        |      |                            |       |      |                                |          |      |          |      |      |
| Approach                   | EB     |                        |      | WB                         |       |      | NB                             |          |      | SB       |      |      |
| HCM Control Delay, s       | 0.1    |                        |      | 0.1                        |       |      | 0                              |          |      | \$ 866.3 |      |      |
| HCM LOS                    |        |                        |      |                            |       |      | A                              |          |      | F        |      |      |
|                            |        |                        |      |                            |       |      |                                |          |      |          |      |      |
| Minor Lane/Major Mvmt      | NBLn1  | EBL                    | EBT  | EBR                        | WBL   | WBT  | WBR                            | SBLn1    |      |          |      |      |
| Capacity (veh/h)           | -      | 670                    | -    | -                          | 234   | -    | -                              | 38       |      |          |      |      |
| HCM Lane V/C Ratio         | -      | 0.024                  | -    | -                          | 0.025 | -    | -                              | 2.406    |      |          |      |      |
| HCM Control Delay (s)      | 0      | 10.5                   | -    | -                          | 20.8  | -    | -                              | \$ 866.3 |      |          |      |      |
| HCM Lane LOS               | A      | B                      | -    | -                          | C     | -    | -                              | F        |      |          |      |      |
| HCM 95th %tile Q(veh)      | -      | 0.1                    | -    | -                          | 0.1   | -    | -                              | 10.1     |      |          |      |      |
| Notes                      |        |                        |      |                            |       |      |                                |          |      |          |      |      |
| ~: Volume exceeds capacity |        | \$: Delay exceeds 300s |      | +: Computation Not Defined |       |      | *: All major volume in platoon |          |      |          |      |      |

Lanier Tract DRI  
3: GA 53 & Avonlea Way

phase two a.m.

Intersection

Int Delay, s/veh 11.1

| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol, veh/h               | 17   | 0    | 79   | 2    | 0    | 13   | 13   | 875  | 2    | 15   | 1881 | 7    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | 0    | -    | 0    | 0    | -    | 0    | 0    | -    | -    | 0    | -    | 0    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 84   | 84   | 84   | 80   | 80   | 80   | 88   | 88   | 88   | 86   | 86   | 86   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 20   | 0    | 94   | 2    | 0    | 16   | 15   | 994  | 2    | 17   | 2187 | 8    |

| Major/Minor          | Minor2 |      |      | Minor1 |      |      | Major1 |   |   | Major2 |   |   |
|----------------------|--------|------|------|--------|------|------|--------|---|---|--------|---|---|
| Conflicting Flow All | 2749   | 3248 | 1094 | 2153   | 3247 | 498  | 2187   | 0 | 0 | 997    | 0 | 0 |
| Stage 1              | 2222   | 2222 | -    | 1025   | 1025 | -    | -      | - | - | -      | - | - |
| Stage 2              | 527    | 1026 | -    | 1128   | 2222 | -    | -      | - | - | -      | - | - |
| Critical Hdwy        | 7.54   | 6.54 | 6.94 | 7.54   | 6.54 | 6.94 | 4.14   | - | - | 4.14   | - | - |
| Critical Hdwy Stg 1  | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    | -      | - | - | -      | - | - |
| Critical Hdwy Stg 2  | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    | -      | - | - | -      | - | - |
| Follow-up Hdwy       | 3.52   | 4.02 | 3.32 | 3.52   | 4.02 | 3.32 | 2.22   | - | - | 2.22   | - | - |
| Pot Cap-1 Maneuver   | ~ 9    | 9    | 209  | 27     | 9    | 518  | 239    | - | - | 690    | - | - |
| Stage 1              | 44     | 79   | -    | 252    | 311  | -    | -      | - | - | -      | - | - |
| Stage 2              | 502    | 310  | -    | 218    | 79   | -    | -      | - | - | -      | - | - |
| Platoon blocked, %   |        |      |      |        |      |      | -      | - |   |        | - | - |
| Mov Cap-1 Maneuver   | ~ 8    | 8    | 209  | 14     | 8    | 518  | 239    | - | - | 690    | - | - |
| Mov Cap-2 Maneuver   | ~ 8    | 8    | -    | 14     | 8    | -    | -      | - | - | -      | - | - |
| Stage 1              | 41     | 77   | -    | 236    | 291  | -    | -      | - | - | -      | - | - |
| Stage 2              | 456    | 291  | -    | 117    | 77   | -    | -      | - | - | -      | - | - |

| Approach             | EB       | WB   | NB  | SB  |
|----------------------|----------|------|-----|-----|
| HCM Control Delay, s | \$ 311.5 | 52.1 | 0.3 | 0.1 |
| HCM LOS              | F        | F    |     |     |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1     | EBLn2 | WBLn1    | WBLn2 | SBL   | SBT | SBR |
|-----------------------|-------|-----|-----|-----------|-------|----------|-------|-------|-----|-----|
| Capacity (veh/h)      | 239   | -   | -   | 8         | 209   | 14       | 518   | 690   | -   | -   |
| HCM Lane V/C Ratio    | 0.062 | -   | -   | 2.53      | 0.45  | 0.179    | 0.031 | 0.025 | -   | -   |
| HCM Control Delay (s) | 21.1  | -   | -   | \$ 1593.4 | 35.6  | \$ 311.5 | 12.2  | 10.4  | -   | -   |
| HCM Lane LOS          | C     | -   | -   | F         | E     | F        | B     | B     | -   | -   |
| HCM 95th %tile Q(veh) | 0.2   | -   | -   | 3.6       | 2.1   | 0.5      | 0.1   | 0.1   | -   | -   |

Notes

~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Lanier Tract DRI  
4: GA 53 & Canterbury Road

phase two a.m.

| Intersection     |    |  |  |  |  |  |  |  |  |  |  |  |
|------------------|----|--|--|--|--|--|--|--|--|--|--|--|
| Int Delay, s/veh | 29 |  |  |  |  |  |  |  |  |  |  |  |

| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol, veh/h               | 20   | 0    | 105  | 29   | 0    | 15   | 25   | 820  | 40   | 30   | 1980 | 8    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | 0    | -    | 0    | 0    | -    | 0    | 0    | -    | -    | 0    | -    | 0    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 88   | 92   | 88   | 92   | 92   | 92   | 86   | 86   | 92   | 92   | 91   | 91   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 23   | 0    | 119  | 32   | 0    | 16   | 29   | 953  | 43   | 33   | 2176 | 9    |

| Major/Minor          | Minor2 |      |      | Minor1 |      |      | Major1 |   |   | Major2 |   |   |
|----------------------|--------|------|------|--------|------|------|--------|---|---|--------|---|---|
| Conflicting Flow All | 2776   | 3296 | 1088 | 2186   | 3274 | 498  | 2176   | 0 | 0 | 997    | 0 | 0 |
| Stage 1              | 2241   | 2241 | -    | 1033   | 1033 | -    | -      | - | - | -      | - | - |
| Stage 2              | 535    | 1055 | -    | 1153   | 2241 | -    | -      | - | - | -      | - | - |
| Critical Hdwy        | 7.54   | 6.54 | 6.94 | 7.54   | 6.54 | 6.94 | 4.14   | - | - | 4.14   | - | - |
| Critical Hdwy Stg 1  | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    | -      | - | - | -      | - | - |
| Critical Hdwy Stg 2  | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    | -      | - | - | -      | - | - |
| Follow-up Hdwy       | 3.52   | 4.02 | 3.32 | 3.52   | 4.02 | 3.32 | 2.22   | - | - | 2.22   | - | - |
| Pot Cap-1 Maneuver   | ~ 9    | 8    | 211  | ~ 25   | 9    | 518  | 241    | - | - | 690    | - | - |
| Stage 1              | 43     | 78   | -    | 249    | 308  | -    | -      | - | - | -      | - | - |
| Stage 2              | 497    | 301  | -    | 210    | 78   | -    | -      | - | - | -      | - | - |
| Platoon blocked, %   |        |      |      |        |      |      | -      | - |   |        | - | - |
| Mov Cap-1 Maneuver   | ~ 8    | 7    | 211  | ~ 10   | 8    | 518  | 241    | - | - | 690    | - | - |
| Mov Cap-2 Maneuver   | ~ 8    | 7    | -    | ~ 10   | 8    | -    | -      | - | - | -      | - | - |
| Stage 1              | 38     | 74   | -    | 219    | 271  | -    | -      | - | - | -      | - | - |
| Stage 2              | 423    | 265  | -    | 87     | 74   | -    | -      | - | - | -      | - | - |

| Approach             | EB       | WB        | NB  | SB  |
|----------------------|----------|-----------|-----|-----|
| HCM Control Delay, s | \$ 312.8 | \$ 1132.9 | 0.6 | 0.2 |
| HCM LOS              | F        | F         |     |     |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1     | EBLn2 | WBLn1     | WBLn2 | SBL   | SBT | SBR |
|-----------------------|-------|-----|-----|-----------|-------|-----------|-------|-------|-----|-----|
| Capacity (veh/h)      | 241   | -   | -   | 8         | 211   | 10        | 518   | 690   | -   | -   |
| HCM Lane V/C Ratio    | 0.121 | -   | -   | 2.841     | 0.565 | 3.152     | 0.031 | 0.047 | -   | -   |
| HCM Control Delay (s) | 22    | -   | -   | \$ 1733.4 | 42.2  | \$ 1712.5 | 12.2  | 10.5  | -   | -   |
| HCM Lane LOS          | C     | -   | -   | F         | E     | F         | B     | B     | -   | -   |
| HCM 95th %tile Q(veh) | 0.4   | -   | -   | 4         | 3.1   | 5         | 0.1   | 0.1   | -   | -   |

| Notes                      |                        |                            |                                |  |  |  |  |  |  |  |
|----------------------------|------------------------|----------------------------|--------------------------------|--|--|--|--|--|--|--|
| ~: Volume exceeds capacity | \$: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |  |  |  |  |  |  |  |

Lanier Tract DRI  
7: GA 53 & Beechwood Boulevard

phase two a.m.

| Intersection                                                                                                         |        |        |        |        |      |      |
|----------------------------------------------------------------------------------------------------------------------|--------|--------|--------|--------|------|------|
| Int Delay, s/veh                                                                                                     | 3.3    |        |        |        |      |      |
| Movement                                                                                                             | EBL    | EBR    | NBL    | NBT    | SBT  | SBR  |
| Vol, veh/h                                                                                                           | 6      | 45     | 30     | 961    | 2306 | 2    |
| Conflicting Peds, #/hr                                                                                               | 0      | 0      | 0      | 0      | 0    | 0    |
| Sign Control                                                                                                         | Stop   | Stop   | Free   | Free   | Free | Free |
| RT Channelized                                                                                                       | -      | Yield  | -      | Yield  | -    | None |
| Storage Length                                                                                                       | 0      | 0      | 200    | -      | -    | 360  |
| Veh in Median Storage, #                                                                                             | 0      | -      | -      | 0      | 0    | -    |
| Grade, %                                                                                                             | 0      | -      | -      | 1      | 0    | -    |
| Peak Hour Factor                                                                                                     | 82     | 82     | 87     | 87     | 89   | 89   |
| Heavy Vehicles, %                                                                                                    | 0      | 0      | 0      | 1      | 0    | 0    |
| Mvmt Flow                                                                                                            | 7      | 55     | 34     | 1105   | 2591 | 2    |
| Major/Minor                                                                                                          | Minor2 | Major1 |        | Major2 |      |      |
| Conflicting Flow All                                                                                                 | 3212   | 1296   | 2591   | 0      | -    | 0    |
| Stage 1                                                                                                              | 2591   | -      | -      | -      | -    | -    |
| Stage 2                                                                                                              | 621    | -      | -      | -      | -    | -    |
| Critical Hdwy                                                                                                        | 6.8    | 6.9    | 4.1    | -      | -    | -    |
| Critical Hdwy Stg 1                                                                                                  | 5.8    | -      | -      | -      | -    | -    |
| Critical Hdwy Stg 2                                                                                                  | 5.8    | -      | -      | -      | -    | -    |
| Follow-up Hdwy                                                                                                       | 3.5    | 3.3    | 2.2    | -      | -    | -    |
| Pot Cap-1 Maneuver                                                                                                   | 8      | 155    | 170    | -      | -    | -    |
| Stage 1                                                                                                              | 43     | -      | -      | -      | -    | -    |
| Stage 2                                                                                                              | 504    | -      | -      | -      | -    | -    |
| Platoon blocked, %                                                                                                   |        |        |        | -      | -    | -    |
| Mov Cap-1 Maneuver                                                                                                   | ~ 6    | 155    | 170    | -      | -    | -    |
| Mov Cap-2 Maneuver                                                                                                   | ~ 6    | -      | -      | -      | -    | -    |
| Stage 1                                                                                                              | 43     | -      | -      | -      | -    | -    |
| Stage 2                                                                                                              | 403    | -      | -      | -      | -    | -    |
| Approach                                                                                                             | EB     | NB     |        | SB     |      |      |
| HCM Control Delay, s                                                                                                 | 180.4  | 1      |        | 0      |      |      |
| HCM LOS                                                                                                              | F      |        |        |        |      |      |
| Minor Lane/Major Mvmt                                                                                                | NBL    | NBT    | EBLn1  | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)                                                                                                     | 170    | -      | 6      | 155    | -    | -    |
| HCM Lane V/C Ratio                                                                                                   | 0.203  | -      | 1.22   | 0.354  | -    | -    |
| HCM Control Delay (s)                                                                                                | 31.5   | \$     | 1230.3 | 40.4   | -    | -    |
| HCM Lane LOS                                                                                                         | D      | -      | F      | E      | -    | -    |
| HCM 95th %tile Q(veh)                                                                                                | 0.7    | -      | 1.7    | 1.5    | -    | -    |
| Notes                                                                                                                |        |        |        |        |      |      |
| ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |        |        |        |        |      |      |

Lanier Tract DRI

5: GA 53 & Lanier Valley Dr/Ahaluna Dr

phase two a.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Volume (vph)               | 21                                                                                | 6                                                                                 | 127                                                                               | 92                                                                                | 3                                                                                 | 27                                                                                | 61                                                                                  | 831                                                                                 | 47                                                                                  | 21                                                                                  | 2139                                                                                | 0                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 2%                                                                                |                                                                                   |                                                                                   | -4%                                                                               |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 100                                                                                 |                                                                                     | 0                                                                                   | 140                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.889                                                                             |                                                                                   |                                                                                   | 0.970                                                                             |                                                                                   |                                                                                     | 0.992                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   | 0.993                                                                             |                                                                                   |                                                                                   | 0.964                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1661                                                                              | 0                                                                                 | 0                                                                                 | 1812                                                                              | 0                                                                                 | 1796                                                                                | 3497                                                                                | 0                                                                                   | 1814                                                                                | 3628                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.945                                                                             |                                                                                   |                                                                                   | 0.481                                                                             |                                                                                   | 0.037                                                                               |                                                                                     |                                                                                     | 0.277                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1580                                                                              | 0                                                                                 | 0                                                                                 | 904                                                                               | 0                                                                                 | 70                                                                                  | 3497                                                                                | 0                                                                                   | 529                                                                                 | 3628                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 58                                                                                |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                     | 11                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 340                                                                               |                                                                                   |                                                                                   | 322                                                                               |                                                                                   |                                                                                     | 888                                                                                 |                                                                                     |                                                                                     | 1417                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.7                                                                               |                                                                                   |                                                                                   | 7.3                                                                               |                                                                                   |                                                                                     | 13.5                                                                                |                                                                                     |                                                                                     | 21.5                                                                                |                                                                                     |
| Peak Hour Factor           | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.83                                                                              | 0.83                                                                              | 0.83                                                                              | 0.85                                                                                | 0.85                                                                                | 0.85                                                                                | 0.87                                                                                | 0.87                                                                                | 0.87                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 23                                                                                | 7                                                                                 | 140                                                                               | 111                                                                               | 4                                                                                 | 33                                                                                | 72                                                                                  | 978                                                                                 | 55                                                                                  | 24                                                                                  | 2459                                                                                | 0                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 170                                                                               | 0                                                                                 | 0                                                                                 | 148                                                                               | 0                                                                                 | 72                                                                                  | 1033                                                                                | 0                                                                                   | 24                                                                                  | 2459                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 |                                                                                     | 0                                                                                   | 336                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   |                                                                                     | 0                                                                                   | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 8                                                                                 | 8                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 10.6                                                                                | 23.0                                                                                |                                                                                     | 23.0                                                                                | 23.0                                                                                |                                                                                     |

# Lanier Tract DRI

## 5: GA 53 & Lanier Valley Dr/Ahaluna Dr

phase two a.m.

|                       |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group            | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Total Split (s)       | 30.0                                                                              | 30.0                                                                              |                                                                                   | 30.0                                                                              | 30.0                                                                              |                                                                                   | 10.6                                                                               | 120.0                                                                               |                                                                                     | 109.4                                                                               | 109.4                                                                               |                                                                                     |
| Total Split (%)       | 20.0%                                                                             | 20.0%                                                                             |                                                                                   | 20.0%                                                                             | 20.0%                                                                             |                                                                                   | 7.1%                                                                               | 80.0%                                                                               |                                                                                     | 72.9%                                                                               | 72.9%                                                                               |                                                                                     |
| Maximum Green (s)     | 23.4                                                                              | 23.4                                                                              |                                                                                   | 23.4                                                                              | 23.4                                                                              |                                                                                   | 5.0                                                                                | 113.9                                                                               |                                                                                     | 103.3                                                                               | 103.3                                                                               |                                                                                     |
| Yellow Time (s)       | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 3.0                                                                                | 4.5                                                                                 |                                                                                     | 4.5                                                                                 | 4.5                                                                                 |                                                                                     |
| All-Red Time (s)      | 2.6                                                                               | 2.6                                                                               |                                                                                   | 2.6                                                                               | 2.6                                                                               |                                                                                   | 2.6                                                                                | 1.6                                                                                 |                                                                                     | 1.6                                                                                 | 1.6                                                                                 |                                                                                     |
| Lost Time Adjust (s)  |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)   |                                                                                   | 6.6                                                                               |                                                                                   |                                                                                   | 6.6                                                                               |                                                                                   | 5.6                                                                                | 6.1                                                                                 |                                                                                     | 6.1                                                                                 | 6.1                                                                                 |                                                                                     |
| Lead/Lag              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                                |                                                                                     |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s) | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode           | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                               | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               |                                                                                     |
| Act Effect Green (s)  |                                                                                   | 23.4                                                                              |                                                                                   |                                                                                   | 23.4                                                                              |                                                                                   | 114.4                                                                              | 113.9                                                                               |                                                                                     | 103.3                                                                               | 103.3                                                                               |                                                                                     |
| Actuated g/C Ratio    |                                                                                   | 0.16                                                                              |                                                                                   |                                                                                   | 0.16                                                                              |                                                                                   | 0.76                                                                               | 0.76                                                                                |                                                                                     | 0.69                                                                                | 0.69                                                                                |                                                                                     |
| v/c Ratio             |                                                                                   | 0.58                                                                              |                                                                                   |                                                                                   | 1.01                                                                              |                                                                                   | 0.65                                                                               | 0.39                                                                                |                                                                                     | 0.07                                                                                | 0.98                                                                                |                                                                                     |
| Control Delay         |                                                                                   | 46.8                                                                              |                                                                                   |                                                                                   | 134.1                                                                             |                                                                                   | 57.0                                                                               | 3.3                                                                                 |                                                                                     | 8.2                                                                                 | 37.4                                                                                |                                                                                     |
| Queue Delay           |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Delay           |                                                                                   | 46.8                                                                              |                                                                                   |                                                                                   | 134.1                                                                             |                                                                                   | 57.0                                                                               | 3.3                                                                                 |                                                                                     | 8.2                                                                                 | 37.4                                                                                |                                                                                     |
| LOS                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | F                                                                                 |                                                                                   | E                                                                                  | A                                                                                   |                                                                                     | A                                                                                   | D                                                                                   |                                                                                     |
| Approach Delay        |                                                                                   | 46.8                                                                              |                                                                                   |                                                                                   | 134.1                                                                             |                                                                                   |                                                                                    | 6.8                                                                                 |                                                                                     |                                                                                     | 37.1                                                                                |                                                                                     |
| Approach LOS          |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | F                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 26 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.01

Intersection Signal Delay: 32.6

Intersection LOS: C

Intersection Capacity Utilization 91.4%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 5: GA 53 & Lanier Valley Dr/Ahaluna Dr

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
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|  |  |  |  |  |  |  |  |  |
| 120 s                                                                               |                                                                                     |                                                                                     | 30 s                                                                                |                                                                                     |                                                                                     | 30 s                                                                                |                                                                                     |                                                                                     |
|  |  |  |  |  |  |  |  |  |
| 10.6 s                                                                              |                                                                                     |                                                                                     | 109.4 s                                                                             |                                                                                     |                                                                                     | 30 s                                                                                |                                                                                     |                                                                                     |



## Lanier Tract DRI

## 6: 53-Dawsonville Hwy &amp; Academy Sports

phase two a.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |  |  |  |  |  |  |  |
| Volume (vph)               | 2                                                                                 | 0                                                                                 | 7                                                                                 | 2                                                                                 | 0                                                                                 | 0                                                                                 | 12                                                                                  | 909                                                                                 | 10                                                                                  | 6                                                                                   | 2287                                                                                | 4                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 4%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 70                                                                                | 200                                                                                 |                                                                                     | 170                                                                                 | 190                                                                                 |                                                                                     | 360                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1805                                                                              | 1900                                                                              | 1615                                                                              | 1769                                                                              | 1862                                                                              | 1862                                                                              | 1796                                                                                | 3556                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 0.031                                                                               |                                                                                     |                                                                                     | 0.266                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1900                                                                              | 1900                                                                              | 1615                                                                              | 1862                                                                              | 1862                                                                              | 1862                                                                              | 59                                                                                  | 3556                                                                                | 1607                                                                                | 505                                                                                 | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 67                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 68                                                                                  |                                                                                     |                                                                                     | 68                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 262                                                                               |                                                                                   |                                                                                   | 246                                                                               |                                                                                   |                                                                                     | 1836                                                                                |                                                                                     |                                                                                     | 685                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.1                                                                               |                                                                                   |                                                                                   | 6.7                                                                               |                                                                                   |                                                                                     | 27.8                                                                                |                                                                                     |                                                                                     | 10.4                                                                                |                                                                                     |
| Peak Hour Factor           | 0.67                                                                              | 0.67                                                                              | 0.67                                                                              | 0.50                                                                              | 0.50                                                                              | 0.50                                                                              | 0.86                                                                                | 0.86                                                                                | 0.86                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 3                                                                                 | 0                                                                                 | 10                                                                                | 4                                                                                 | 0                                                                                 | 0                                                                                 | 14                                                                                  | 1057                                                                                | 12                                                                                  | 7                                                                                   | 2541                                                                                | 4                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 3                                                                                 | 0                                                                                 | 10                                                                                | 4                                                                                 | 0                                                                                 | 0                                                                                 | 14                                                                                  | 1057                                                                                | 12                                                                                  | 7                                                                                   | 2541                                                                                | 4                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              |                                                                                   | Perm                                                                              | Perm                                                                              |                                                                                   | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 2                                                                                   |                                                                                     | 2                                                                                   | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 42.0                                                                              | 42.0                                                                              | 42.0                                                                              | 42.4                                                                              | 42.4                                                                              | 42.4                                                                              | 11.4                                                                                | 30.3                                                                                | 30.3                                                                                | 11.0                                                                                | 29.3                                                                                | 29.3                                                                                |

Synchro 8 Report

Marc R Acampora, PE, LLC

# Lanier Tract DRI

## 6: 53-Dawsonville Hwy & Academy Sports

phase two a.m.

|                         |  |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 42.4                                                                               | 42.4  | 42.4  | 42.4  | 42.4  | 42.4  | 11.4  | 96.6  | 96.6  | 11.0  | 96.2  | 96.2  |
| Total Split (%)         | 28.3%                                                                              | 28.3% | 28.3% | 28.3% | 28.3% | 28.3% | 7.6%  | 64.4% | 64.4% | 7.3%  | 64.1% | 64.1% |
| Maximum Green (s)       | 36.0                                                                               | 36.0  | 36.0  | 36.0  | 36.0  | 36.0  | 5.0   | 90.4  | 90.4  | 5.0   | 90.0  | 90.0  |
| Yellow Time (s)         | 3.4                                                                                | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 4.3   | 4.3   | 3.0   | 4.3   | 4.3   |
| All-Red Time (s)        | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 1.9   | 1.9   | 3.0   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.4                                                                                | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.2   | 6.2   | 6.0   | 6.2   | 6.2   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           | 4.0                                                                                | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 23.0                                                                               | 23.0  | 23.0  | 32.0  | 32.0  | 32.0  |       | 20.0  | 20.0  |       | 19.0  | 19.0  |
| Pedestrian Calls (#/hr) | 0                                                                                  | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    | 6.1                                                                                |       | 6.1   | 6.1   |       |       | 137.2 | 139.9 | 139.9 | 136.1 | 137.4 | 137.4 |
| Actuated g/C Ratio      | 0.04                                                                               |       | 0.04  | 0.04  |       |       | 0.91  | 0.93  | 0.93  | 0.91  | 0.92  | 0.92  |
| v/c Ratio               | 0.04                                                                               |       | 0.08  | 0.05  |       |       | 0.12  | 0.32  | 0.01  | 0.01  | 0.77  | 0.00  |
| Control Delay           | 69.5                                                                               |       | 1.1   | 70.0  |       |       | 6.0   | 1.1   | 0.0   | 0.8   | 5.1   | 0.0   |
| Queue Delay             | 0.0                                                                                |       | 0.0   | 0.0   |       |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay             | 69.5                                                                               |       | 1.1   | 70.0  |       |       | 6.0   | 1.1   | 0.0   | 0.8   | 5.1   | 0.0   |
| LOS                     | E                                                                                  |       | A     | E     |       |       | A     | A     | A     | A     | A     | A     |
| Approach Delay          |                                                                                    |       |       |       |       |       |       | 1.2   |       |       | 5.1   |       |
| Approach LOS            |                                                                                    |       |       |       |       |       |       | A     |       |       | A     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 27 (18%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 145

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.77

Intersection Signal Delay: 4.0

Intersection LOS: A

Intersection Capacity Utilization 87.4%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 6: 53-Dawsonville Hwy & Academy Sports

|                                                                                        |                                                                                            |  |                                                                                          |
|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------|
|  p1 |  p2 (R) |  |  p4 |
| 11 s                                                                                   | 96.6 s                                                                                     |  | 42.4 s                                                                                   |
|  p5 |  p6 (R) |  |  p8 |
| 11.4 s                                                                                 | 96.2 s                                                                                     |  | 42.4 s                                                                                   |

## Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 &amp; McEver Road/McEver

phase two a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |                                                                                   |   |  |  |  |  |  |
| Volume (vph)               | 462                                                                               | 31                                                                                | 378                                                                               | 46                                                                                | 21                                                                                | 22                                                                                | 311                                                                                 | 572                                                                                 | 61                                                                                  | 34                                                                                  | 1352                                                                                | 942                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 1%                                                                                |                                                                                   |                                                                                   | 5%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 180                                                                               |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 310                                                                                 |                                                                                     | 185                                                                                 | 255                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 50                                                                                |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.872                                                                             | 0.850                                                                             |                                                                                   | 0.924                                                                             |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 3484                                                                              | 1566                                                                              | 1527                                                                              | 1760                                                                              | 1712                                                                              | 0                                                                                 | 3484                                                                                | 3487                                                                                | 1575                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   | 0.599                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 3484                                                                              | 1566                                                                              | 1527                                                                              | 1110                                                                              | 1712                                                                              | 0                                                                                 | 3484                                                                                | 3487                                                                                | 1575                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 183                                                                               | 207                                                                               |                                                                                   | 34                                                                                |                                                                                   |                                                                                     |                                                                                     | 184                                                                                 |                                                                                     |                                                                                     | 541                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 45                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 580                                                                               |                                                                                   |                                                                                   | 331                                                                               |                                                                                   |                                                                                     | 921                                                                                 |                                                                                     |                                                                                     | 1624                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 8.8                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                     | 14.0                                                                                |                                                                                     |                                                                                     | 24.6                                                                                |                                                                                     |
| Peak Hour Factor           | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.62                                                                              | 0.62                                                                              | 0.62                                                                              | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 3%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 476                                                                               | 32                                                                                | 390                                                                               | 74                                                                                | 34                                                                                | 35                                                                                | 334                                                                                 | 615                                                                                 | 66                                                                                  | 38                                                                                  | 1502                                                                                | 1047                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   | 47%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 476                                                                               | 215                                                                               | 207                                                                               | 74                                                                                | 69                                                                                | 0                                                                                 | 334                                                                                 | 615                                                                                 | 66                                                                                  | 38                                                                                  | 1502                                                                                | 1047                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 24                                                                                |                                                                                   |                                                                                   | 24                                                                                |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                             | NA                                                                                |                                                                                   | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 8                                                                                 |                                                                                   | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 8                                                                                 | 8                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 13.2                                                                              | 50.2                                                                              | 50.2                                                                              | 11.6                                                                              | 48.2                                                                              |                                                                                   | 13.4                                                                                | 35.6                                                                                | 35.6                                                                                | 12.9                                                                                | 44.6                                                                                | 44.6                                                                                |

# Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 & McEver Road/McEver

phase two a.m.

|                         |  |       |       |      |       |     |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|------|-------|-----|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL  | WBT   | WBR | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 23.0                                                                               | 59.1  | 59.1  | 12.1 | 48.2  |     | 19.0  | 63.0  | 63.0  | 15.8  | 59.8  | 59.8  |
| Total Split (%)         | 15.3%                                                                              | 39.4% | 39.4% | 8.1% | 32.1% |     | 12.7% | 42.0% | 42.0% | 10.5% | 39.9% | 39.9% |
| Maximum Green (s)       | 15.7                                                                               | 51.8  | 51.8  | 5.6  | 40.9  |     | 11.5  | 56.4  | 56.4  | 8.6   | 53.2  | 53.2  |
| Yellow Time (s)         | 4.3                                                                                | 4.3   | 4.3   | 3.5  | 4.3   |     | 4.5   | 4.4   | 4.4   | 4.2   | 4.4   | 4.4   |
| All-Red Time (s)        | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 2.2   | 2.2   | 3.0   | 2.2   | 2.2   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 7.3                                                                                | 7.3   | 7.3   | 6.5  | 7.3   |     | 7.5   | 6.6   | 6.6   | 7.2   | 6.6   | 6.6   |
| Lead/Lag                | Lead                                                                               | Lag   | Lag   | Lead | Lag   |     | Lag   | Lag   | Lag   | Lead  | Lead  | Lead  |
| Lead-Lag Optimize?      | Yes                                                                                | Yes   | Yes   | Yes  | Yes   |     | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None | None  |     | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           |                                                                                    | 4.0   | 4.0   |      | 4.0   |     |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    | 38.0  | 38.0  |      | 36.0  |     |       | 25.0  | 25.0  |       | 34.0  | 34.0  |
| Pedestrian Calls (#/hr) |                                                                                    | 0     | 0     |      | 0     |     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    | 16.1                                                                               | 17.6  | 17.6  | 14.0 | 8.9   |     | 11.5  | 93.2  | 93.2  | 8.5   | 87.4  | 87.4  |
| Actuated g/C Ratio      | 0.11                                                                               | 0.12  | 0.12  | 0.09 | 0.06  |     | 0.08  | 0.62  | 0.62  | 0.06  | 0.58  | 0.58  |
| v/c Ratio               | 1.28                                                                               | 0.62  | 0.57  | 0.58 | 0.52  |     | 1.25  | 0.28  | 0.06  | 0.37  | 0.71  | 0.89  |
| Control Delay           | 194.8                                                                              | 20.5  | 13.4  | 70.0 | 51.0  |     | 197.4 | 17.8  | 1.4   | 74.9  | 24.1  | 17.6  |
| Queue Delay             | 0.0                                                                                | 0.0   | 0.0   | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay             | 194.8                                                                              | 20.5  | 13.4  | 70.0 | 51.0  |     | 197.4 | 17.8  | 1.4   | 74.9  | 24.1  | 17.6  |
| LOS                     | F                                                                                  | C     | B     | E    | D     |     | F     | B     | A     | E     | C     | B     |
| Approach Delay          |                                                                                    | 111.2 |       |      | 60.9  |     |       | 75.8  |       |       | 22.2  |       |
| Approach LOS            |                                                                                    | F     |       |      | E     |     |       | E     |       |       | C     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 19 (13%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.28

Intersection Signal Delay: 52.3

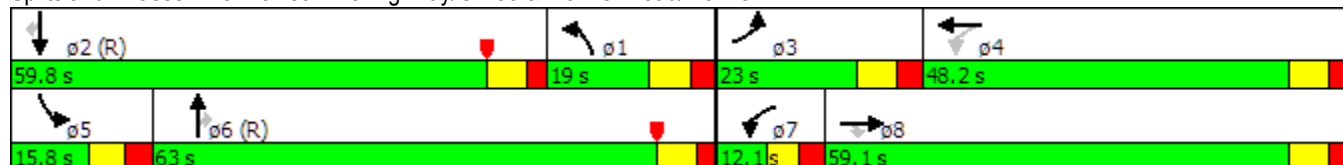
Intersection LOS: D

Intersection Capacity Utilization 89.2%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 8: Dawsonville Highway/GA 53 & McEver Road/McEver



## Lanier Tract DRI

## 9: Dawsonville Highway &amp; Greenhill Circle/Greenhill Circle

phase two a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 74                                                                                | 1                                                                                 | 156                                                                               | 7                                                                                 | 1                                                                                 | 4                                                                                 | 149                                                                                 | 891                                                                                 | 11                                                                                  | 13                                                                                  | 1610                                                                                | 57                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 3%                                                                                |                                                                                   |                                                                                   | 7%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 190                                                                                 |                                                                                     | 190                                                                                 | 185                                                                                 |                                                                                     | 100                                                                                 |
| Storage Lanes              | 0                                                                                 |                                                                                   | 1                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              |                                                                                   | 0.953                                                                             |                                                                                   |                                                                                   | 0.957                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1784                                                                              | 1591                                                                              | 0                                                                                 | 1755                                                                              | 1558                                                                              | 1796                                                                                | 3522                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   | 0.721                                                                             |                                                                                   |                                                                                   | 0.751                                                                             |                                                                                   | 0.072                                                                               |                                                                                     |                                                                                     | 0.277                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1349                                                                              | 1591                                                                              | 0                                                                                 | 1377                                                                              | 1558                                                                              | 136                                                                                 | 3522                                                                                | 1607                                                                                | 526                                                                                 | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 130                                                                               |                                                                                   |                                                                                   | 102                                                                               |                                                                                     |                                                                                     | 57                                                                                  |                                                                                     |                                                                                     | 101                                                                                 |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 288                                                                               |                                                                                   |                                                                                   | 254                                                                               |                                                                                   |                                                                                     | 778                                                                                 |                                                                                     |                                                                                     | 921                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.9                                                                               |                                                                                   |                                                                                   | 6.9                                                                               |                                                                                   |                                                                                     | 11.8                                                                                |                                                                                     |                                                                                     | 14.0                                                                                |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.69                                                                              | 0.69                                                                              | 0.69                                                                              | 0.86                                                                                | 0.86                                                                                | 0.86                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 82                                                                                | 1                                                                                 | 173                                                                               | 10                                                                                | 1                                                                                 | 6                                                                                 | 173                                                                                 | 1036                                                                                | 13                                                                                  | 14                                                                                  | 1750                                                                                | 62                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 83                                                                                | 173                                                                               | 0                                                                                 | 11                                                                                | 6                                                                                 | 173                                                                                 | 1036                                                                                | 13                                                                                  | 14                                                                                  | 1750                                                                                | 62                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.02                                                                              | 1.02                                                                              | 1.02                                                                              | 1.05                                                                              | 1.05                                                                              | 1.05                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              | 23.0                                                                              | 39.9                                                                              | 39.9                                                                              | 39.9                                                                              | 11.0                                                                                | 28.0                                                                                | 28.0                                                                                | 10.0                                                                                | 36.0                                                                                | 36.0                                                                                |

# Lanier Tract DRI

## 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle

phase two a.m.

|                         |  |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 39.9                                                                               | 39.9  | 39.9  | 39.9  | 39.9  | 39.9  | 21.0  | 100.1 | 100.1 | 10.0  | 89.1  | 89.1  |
| Total Split (%)         | 26.6%                                                                              | 26.6% | 26.6% | 26.6% | 26.6% | 26.6% | 14.0% | 66.7% | 66.7% | 6.7%  | 59.4% | 59.4% |
| Maximum Green (s)       | 34.0                                                                               | 34.0  | 34.0  | 34.0  | 34.0  | 34.0  | 15.0  | 94.1  | 94.1  | 5.0   | 83.1  | 83.1  |
| Yellow Time (s)         | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 4.4   | 4.4   | 3.5   | 4.4   | 4.4   |
| All-Red Time (s)        | 2.9                                                                                | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 3.0   | 1.6   | 1.6   | 1.5   | 1.6   | 1.6   |
| Lost Time Adjust (s)    |                                                                                    | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |                                                                                    | 5.9   | 5.9   |       | 5.9   | 5.9   | 6.0   | 6.0   | 6.0   | 5.0   | 6.0   | 6.0   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           |                                                                                    |       |       | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    |       |       | 30.0  | 30.0  | 30.0  |       | 18.0  | 18.0  |       | 26.0  | 26.0  |
| Pedestrian Calls (#/hr) |                                                                                    |       |       | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    |                                                                                    | 14.6  | 14.6  |       | 14.6  | 14.6  | 123.5 | 119.1 | 119.1 | 108.7 | 102.0 | 102.0 |
| Actuated g/C Ratio      |                                                                                    | 0.10  | 0.10  |       | 0.10  | 0.10  | 0.82  | 0.79  | 0.79  | 0.72  | 0.68  | 0.68  |
| v/c Ratio               |                                                                                    | 0.64  | 0.64  |       | 0.08  | 0.02  | 0.61  | 0.37  | 0.01  | 0.03  | 0.71  | 0.05  |
| Control Delay           |                                                                                    | 85.5  | 29.1  |       | 59.9  | 0.2   | 33.5  | 4.7   | 0.0   | 4.2   | 14.8  | 1.0   |
| Queue Delay             |                                                                                    | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.1   | 0.0   |
| Total Delay             |                                                                                    | 85.5  | 29.1  |       | 59.9  | 0.2   | 33.5  | 4.7   | 0.0   | 4.2   | 14.9  | 1.0   |
| LOS                     |                                                                                    | F     | C     |       | E     | A     | C     | A     | A     | A     | B     | A     |
| Approach Delay          |                                                                                    | 47.4  |       |       | 38.8  |       |       | 8.7   |       |       | 14.4  |       |
| Approach LOS            |                                                                                    | D     |       |       | D     |       |       | A     |       |       | B     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 15.0

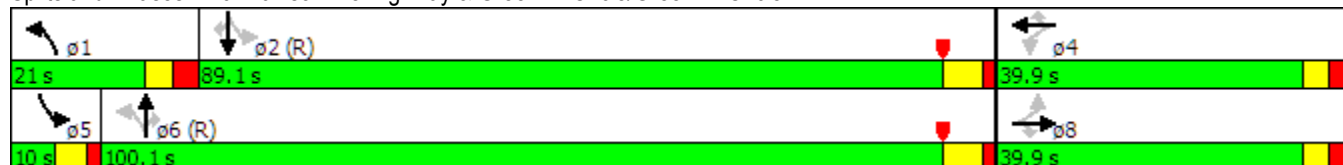
Intersection LOS: B

Intersection Capacity Utilization 78.5%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle



## Lanier Tract DRI

## 10: Dawsonville Highway &amp; Shallowford Rd/Best Buy

phase two a.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 162                                                                               | 2                                                                                 | 9                                                                                 | 2                                                                                 | 4                                                                                 | 3                                                                                 | 11                                                                                  | 864                                                                                 | 14                                                                                  | 1                                                                                   | 1425                                                                                | 387                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | -1%                                                                               |                                                                                   |                                                                                   | 10%                                                                               |                                                                                   |                                                                                     | -4%                                                                                 |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 350                                                                               |                                                                                   | 350                                                                               | 0                                                                                 |                                                                                   | 0                                                                                 | 350                                                                                 |                                                                                     | 150                                                                                 | 265                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 100                                                                               |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             | 0.953                                                                             |                                                                                   |                                                                                   | 0.982                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1723                                                                              | 1729                                                                              | 1623                                                                              | 0                                                                                 | 1773                                                                              | 1534                                                                              | 1841                                                                                | 3646                                                                                | 1647                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             | 0.953                                                                             |                                                                                   |                                                                                   | 0.982                                                                             |                                                                                   | 0.115                                                                               |                                                                                     |                                                                                     | 0.273                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1723                                                                              | 1729                                                                              | 1623                                                                              | 0                                                                                 | 1773                                                                              | 1534                                                                              | 223                                                                                 | 3646                                                                                | 1647                                                                                | 521                                                                                 | 3592                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 113                                                                               |                                                                                   |                                                                                   | 119                                                                               |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     | 219                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 653                                                                               |                                                                                   |                                                                                   | 178                                                                               |                                                                                   |                                                                                     | 957                                                                                 |                                                                                     |                                                                                     | 778                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 9.9                                                                               |                                                                                   |                                                                                   | 4.9                                                                               |                                                                                   |                                                                                     | 14.5                                                                                |                                                                                     |                                                                                     | 11.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.84                                                                              | 0.84                                                                              | 0.84                                                                              | 0.56                                                                              | 0.56                                                                              | 0.56                                                                              | 0.83                                                                                | 0.83                                                                                | 0.83                                                                                | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 193                                                                               | 2                                                                                 | 11                                                                                | 4                                                                                 | 7                                                                                 | 5                                                                                 | 13                                                                                  | 1041                                                                                | 17                                                                                  | 1                                                                                   | 1532                                                                                | 416                                                                                 |
| Shared Lane Traffic (%)    | 50%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 96                                                                                | 99                                                                                | 11                                                                                | 0                                                                                 | 11                                                                                | 5                                                                                 | 13                                                                                  | 1041                                                                                | 17                                                                                  | 1                                                                                   | 1532                                                                                | 416                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 0.99                                                                              | 0.99                                                                              | 0.99                                                                              | 1.07                                                                              | 1.07                                                                              | 1.07                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Split                                                                             | NA                                                                                | Perm                                                                              | Split                                                                             | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | Perm                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 3                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 3                                                                                 | 3                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 36.7                                                                              | 36.7                                                                              | 36.7                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                                | 28.8                                                                                | 28.8                                                                                | 30.8                                                                                | 30.8                                                                                | 30.8                                                                                |

# Lanier Tract DRI

## 10: Dawsonville Highway & Shallowford Rd/Best Buy

phase two a.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Total Split (s)         | 36.7                                                                              | 36.7                                                                              | 36.7                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                               | 74.4                                                                                | 74.4                                                                                | 63.6                                                                                | 63.6                                                                                | 63.6                                                                                |
| Total Split (%)         | 24.5%                                                                             | 24.5%                                                                             | 24.5%                                                                             | 25.9%                                                                             | 25.9%                                                                             | 25.9%                                                                             | 7.2%                                                                               | 49.6%                                                                               | 49.6%                                                                               | 42.4%                                                                               | 42.4%                                                                               | 42.4%                                                                               |
| Maximum Green (s)       | 30.0                                                                              | 30.0                                                                              | 30.0                                                                              | 33.0                                                                              | 33.0                                                                              | 33.0                                                                              | 5.0                                                                                | 67.6                                                                                | 67.6                                                                                | 56.8                                                                                | 56.8                                                                                | 56.8                                                                                |
| Yellow Time (s)         | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 4.9                                                                                 | 4.9                                                                                 | 4.9                                                                                 | 4.9                                                                                 | 4.9                                                                                 |
| All-Red Time (s)        | 2.2                                                                               | 2.2                                                                               | 2.2                                                                               | 2.9                                                                               | 2.9                                                                               | 2.9                                                                               | 2.8                                                                                | 1.9                                                                                 | 1.9                                                                                 | 1.9                                                                                 | 1.9                                                                                 | 1.9                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.7                                                                               | 6.7                                                                               | 6.7                                                                               |                                                                                   | 5.9                                                                               | 5.9                                                                               | 5.8                                                                                | 6.8                                                                                 | 6.8                                                                                 | 6.8                                                                                 | 6.8                                                                                 | 6.8                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lag                                                                               | Lead                                                                               |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 | Lag                                                                                 |
| Lead-Lag Optimize?      | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                                |                                                                                     |                                                                                     | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                               | C-Min                                                                               | C-Min                                                                               | C-Min                                                                               | C-Min                                                                               | C-Min                                                                               |
| Walk Time (s)           | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                    | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |
| Flash Dont Walk (s)     | 26.0                                                                              | 26.0                                                                              | 26.0                                                                              | 29.0                                                                              | 29.0                                                                              | 29.0                                                                              |                                                                                    | 18.0                                                                                | 18.0                                                                                | 20.0                                                                                | 20.0                                                                                | 20.0                                                                                |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Act Effect Green (s)    | 13.9                                                                              | 13.9                                                                              | 13.9                                                                              |                                                                                   | 6.5                                                                               | 6.5                                                                               | 118.2                                                                              | 117.2                                                                               | 117.2                                                                               | 112.4                                                                               | 112.4                                                                               | 112.4                                                                               |
| Actuated g/C Ratio      | 0.09                                                                              | 0.09                                                                              | 0.09                                                                              |                                                                                   | 0.04                                                                              | 0.04                                                                              | 0.79                                                                               | 0.78                                                                                | 0.78                                                                                | 0.75                                                                                | 0.75                                                                                | 0.75                                                                                |
| v/c Ratio               | 0.60                                                                              | 0.62                                                                              | 0.04                                                                              |                                                                                   | 0.14                                                                              | 0.03                                                                              | 0.05                                                                               | 0.37                                                                                | 0.01                                                                                | 0.00                                                                                | 0.57                                                                                | 0.33                                                                                |
| Control Delay           | 80.2                                                                              | 81.2                                                                              | 0.3                                                                               |                                                                                   | 72.5                                                                              | 0.3                                                                               | 6.1                                                                                | 6.5                                                                                 | 0.0                                                                                 | 7.0                                                                                 | 11.6                                                                                | 4.6                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.5                                                                                 | 0.0                                                                                 |
| Total Delay             | 80.2                                                                              | 81.2                                                                              | 0.3                                                                               |                                                                                   | 72.5                                                                              | 0.3                                                                               | 6.1                                                                                | 6.5                                                                                 | 0.0                                                                                 | 7.0                                                                                 | 12.0                                                                                | 4.6                                                                                 |
| LOS                     | F                                                                                 | F                                                                                 | A                                                                                 |                                                                                   | E                                                                                 | A                                                                                 | A                                                                                  | A                                                                                   | A                                                                                   | A                                                                                   | B                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 76.4                                                                              |                                                                                   |                                                                                   | 49.9                                                                              |                                                                                   |                                                                                    | 6.4                                                                                 |                                                                                     |                                                                                     | 10.4                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | E                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 45 (30%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.62

Intersection Signal Delay: 13.5

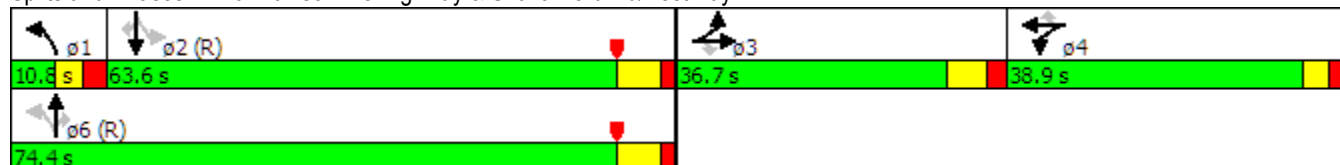
Intersection LOS: B

Intersection Capacity Utilization 63.9%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 10: Dawsonville Highway & Shallowford Rd/Best Buy





Lanier Tract DRI  
1: Sportsman Club Road & Strickland Drive

phase two p.m.

Intersection

Int Delay, s/veh 3.2

| Movement                 | WBL  | WBR  | NBT  | NBR  | SBL  | SBT  |
|--------------------------|------|------|------|------|------|------|
| Vol, veh/h               | 24   | 0    | 32   | 28   | 0    | 25   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | 0    | -    | -    | 0    |
| Grade, %                 | 0    | -    | 0    | -    | -    | 0    |
| Peak Hour Factor         | 44   | 44   | 86   | 86   | 82   | 82   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 55   | 0    | 37   | 33   | 0    | 30   |

| Major/Minor          | Minor1 | Major1 | Major2      |
|----------------------|--------|--------|-------------|
| Conflicting Flow All | 83     | 53     | 0 0 70 0    |
| Stage 1              | 53     | -      | - - - -     |
| Stage 2              | 30     | -      | - - - -     |
| Critical Hdwy        | 6.42   | 6.22   | - - 4.12 -  |
| Critical Hdwy Stg 1  | 5.42   | -      | - - - -     |
| Critical Hdwy Stg 2  | 5.42   | -      | - - - -     |
| Follow-up Hdwy       | 3.518  | 3.318  | - - 2.218 - |
| Pot Cap-1 Maneuver   | 919    | 1014   | - - 1531 -  |
| Stage 1              | 970    | -      | - - - -     |
| Stage 2              | 993    | -      | - - - -     |
| Platoon blocked, %   |        |        | - - - -     |
| Mov Cap-1 Maneuver   | 919    | 1014   | - - 1531 -  |
| Mov Cap-2 Maneuver   | 919    | -      | - - - -     |
| Stage 1              | 970    | -      | - - - -     |
| Stage 2              | 993    | -      | - - - -     |

| Approach             | WB  | NB | SB |
|----------------------|-----|----|----|
| HCM Control Delay, s | 9.2 | 0  | 0  |
| HCM LOS              | A   |    |    |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL  | SBT |
|-----------------------|-----|----------|------|-----|
| Capacity (veh/h)      | -   | - 919    | 1531 | -   |
| HCM Lane V/C Ratio    | -   | - 0.059  | -    | -   |
| HCM Control Delay (s) | -   | - 9.2    | 0    | -   |
| HCM Lane LOS          | -   | - A      | A    | -   |
| HCM 95th %tile Q(veh) | -   | - 0.2    | 0    | -   |

Lanier Tract DRI  
2: GA 53 & Sportsman Club Road

phase two p.m.

| Intersection     |      |  |  |  |  |  |  |  |  |  |  |  |
|------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Int Delay, s/veh | 74.3 |  |  |  |  |  |  |  |  |  |  |  |

| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol, veh/h               | 22   | 1201 | 0    | 26   | 1914 | 34   | 0    | 0    | 0    | 42   | 0    | 15   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 95   | 95   | 95   | 96   | 96   | 96   | 92   | 92   | 92   | 75   | 75   | 75   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 23   | 1264 | 0    | 27   | 1994 | 35   | 0    | 0    | 0    | 56   | 0    | 20   |

| Major/Minor          | Major1 |   |   | Major2 |   |   | Minor1 |      |      | Minor2 |      |      |
|----------------------|--------|---|---|--------|---|---|--------|------|------|--------|------|------|
| Conflicting Flow All | 2029   | 0 | 0 | 1264   | 0 | 0 | 2362   | 3394 | 632  | 2744   | 3377 | 1015 |
| Stage 1              | -      | - | - | -      | - | - | 1311   | 1311 | -    | 2066   | 2066 | -    |
| Stage 2              | -      | - | - | -      | - | - | 1051   | 2083 | -    | 678    | 1311 | -    |
| Critical Hdwy        | 4.14   | - | - | 4.14   | - | - | 7.54   | 6.54 | 6.94 | 7.54   | 6.54 | 6.94 |
| Critical Hdwy Stg 1  | -      | - | - | -      | - | - | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    |
| Critical Hdwy Stg 2  | -      | - | - | -      | - | - | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    |
| Follow-up Hdwy       | 2.22   | - | - | 2.22   | - | - | 3.52   | 4.02 | 3.32 | 3.52   | 4.02 | 3.32 |
| Pot Cap-1 Maneuver   | 276    | - | - | 546    | - | - | 19     | 7    | 423  | ~ 9    | 7    | 236  |
| Stage 1              | -      | - | - | -      | - | - | 168    | 227  | -    | 56     | 95   | -    |
| Stage 2              | -      | - | - | -      | - | - | 243    | 94   | -    | 408    | 227  | -    |
| Platoon blocked, %   | -      | - | - | -      | - | - | -      | -    | -    | -      | -    | -    |
| Mov Cap-1 Maneuver   | 276    | - | - | 546    | - | - | 16     | 6    | 423  | ~ 8    | 6    | 236  |
| Mov Cap-2 Maneuver   | -      | - | - | -      | - | - | 16     | 6    | -    | ~ 8    | 6    | -    |
| Stage 1              | -      | - | - | -      | - | - | 154    | 208  | -    | ~ 51   | 90   | -    |
| Stage 2              | -      | - | - | -      | - | - | 211    | 89   | -    | 374    | 208  | -    |

| Approach             | EB  | WB  | NB | SB        |
|----------------------|-----|-----|----|-----------|
| HCM Control Delay, s | 0.3 | 0.2 | 0  | \$ 3330.7 |
| HCM LOS              |     |     | A  | F         |

| Minor Lane/Major Mvmt | NBLn1 | EBL   | EBT | EBR | WBL  | WBT | WBR | SBLn1     |
|-----------------------|-------|-------|-----|-----|------|-----|-----|-----------|
| Capacity (veh/h)      | -     | 276   | -   | -   | 546  | -   | -   | 11        |
| HCM Lane V/C Ratio    | -     | 0.084 | -   | -   | 0.05 | -   | -   | 6.909     |
| HCM Control Delay (s) | 0     | 19.2  | -   | -   | 11.9 | -   | -   | \$ 3330.7 |
| HCM Lane LOS          | A     | C     | -   | -   | B    | -   | -   | F         |
| HCM 95th %tile Q(veh) | -     | 0.3   | -   | -   | 0.2  | -   | -   | 10.8      |

| Notes                                                                                                                |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |  |  |  |  |  |  |  |  |  |  |  |  |

Lanier Tract DRI  
3: Avonlea Way & GA 53

phase two p.m.

Intersection

Int Delay, s/veh 4.5

| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol, veh/h               | 12   | 0    | 52   | 2    | 0    | 11   | 68   | 1896 | 17   | 10   | 1298 | 15   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | 0    | -    | 0    | 0    | -    | 0    | 0    | -    | -    | 0    | -    | 0    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 76   | 76   | 76   | 80   | 80   | 80   | 95   | 95   | 95   | 100  | 100  | 100  |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 16   | 0    | 68   | 2    | 0    | 14   | 72   | 1996 | 18   | 10   | 1298 | 15   |

| Major/Minor          | Minor2 |      |      | Minor1 |      |      | Major1 |   |   | Major2 |   |   |
|----------------------|--------|------|------|--------|------|------|--------|---|---|--------|---|---|
| Conflicting Flow All | 2459   | 3475 | 649  | 2817   | 3466 | 1007 | 1298   | 0 | 0 | 2014   | 0 | 0 |
| Stage 1              | 1318   | 1318 | -    | 2148   | 2148 | -    | -      | - | - | -      | - | - |
| Stage 2              | 1141   | 2157 | -    | 669    | 1318 | -    | -      | - | - | -      | - | - |
| Critical Hdwy        | 7.54   | 6.54 | 6.94 | 7.54   | 6.54 | 6.94 | 4.14   | - | - | 4.14   | - | - |
| Critical Hdwy Stg 1  | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    | -      | - | - | -      | - | - |
| Critical Hdwy Stg 2  | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    | -      | - | - | -      | - | - |
| Follow-up Hdwy       | 3.52   | 4.02 | 3.32 | 3.52   | 4.02 | 3.32 | 2.22   | - | - | 2.22   | - | - |
| Pot Cap-1 Maneuver   | 16     | 6    | 412  | 8      | 7    | 239  | 530    | - | - | 279    | - | - |
| Stage 1              | 166    | 225  | -    | 49     | 87   | -    | -      | - | - | -      | - | - |
| Stage 2              | 214    | 86   | -    | 413    | 225  | -    | -      | - | - | -      | - | - |
| Platoon blocked, %   |        |      |      |        |      |      |        | - | - |        | - | - |
| Mov Cap-1 Maneuver   | ~ 13   | 5    | 412  | 6      | 6    | 239  | 530    | - | - | 279    | - | - |
| Mov Cap-2 Maneuver   | ~ 13   | 5    | -    | 6      | 6    | -    | -      | - | - | -      | - | - |
| Stage 1              | 143    | 217  | -    | 42     | 75   | -    | -      | - | - | -      | - | - |
| Stage 2              | 174    | 74   | -    | 332    | 217  | -    | -      | - | - | -      | - | - |

| Approach             | EB  | WB    | NB  | SB  |
|----------------------|-----|-------|-----|-----|
| HCM Control Delay, s | 148 | 146.1 | 0.4 | 0.1 |
| HCM LOS              | F   | F     |     |     |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1    | EBLn2 | WBLn1    | WBLn2 | SBL   | SBT | SBR |
|-----------------------|-------|-----|-----|----------|-------|----------|-------|-------|-----|-----|
| Capacity (veh/h)      | 530   | -   | -   | 13       | 412   | 6        | 239   | 279   | -   | -   |
| HCM Lane V/C Ratio    | 0.135 | -   | -   | 1.215    | 0.166 | 0.417    | 0.058 | 0.036 | -   | -   |
| HCM Control Delay (s) | 12.8  | -   | -   | \$ 722.2 | 15.5  | \$ 833.9 | 21    | 18.4  | -   | -   |
| HCM Lane LOS          | B     | -   | -   | F        | C     | F        | C     | C     | -   | -   |
| HCM 95th %tile Q(veh) | 0.5   | -   | -   | 2.6      | 0.6   | 0.8      | 0.2   | 0.1   | -   | -   |

Notes

~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Lanier Tract DRI  
4: Canterbury Road & GA 53

phase two p.m.

| Intersection     |       |  |  |  |  |  |  |  |  |  |  |  |
|------------------|-------|--|--|--|--|--|--|--|--|--|--|--|
| Int Delay, s/veh | 852.3 |  |  |  |  |  |  |  |  |  |  |  |

| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol, veh/h               | 8    | 0    | 31   | 116  | 0    | 92   | 123  | 1860 | 128  | 68   | 1238 | 15   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | 0    | -    | 0    | 0    | -    | 0    | 0    | -    | 0    | 0    | -    | 0    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 80   | 80   | 80   | 70   | 70   | 70   | 96   | 96   | 96   | 96   | 96   | 96   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 10   | 0    | 39   | 166  | 0    | 131  | 128  | 1938 | 133  | 71   | 1290 | 16   |

| Major/Minor          | Minor2 |      |      | Minor1 |      |      | Major1 |   |   | Major2 |   |   |
|----------------------|--------|------|------|--------|------|------|--------|---|---|--------|---|---|
| Conflicting Flow All | 2656   | 3625 | 645  | 2980   | 3625 | 969  | 1290   | 0 | 0 | 1938   | 0 | 0 |
| Stage 1              | 1431   | 1431 | -    | 2194   | 2194 | -    | -      | - | - | -      | - | - |
| Stage 2              | 1225   | 2194 | -    | 786    | 1431 | -    | -      | - | - | -      | - | - |
| Critical Hdwy        | 7.54   | 6.54 | 6.94 | 7.54   | 6.54 | 6.94 | 4.14   | - | - | 4.14   | - | - |
| Critical Hdwy Stg 1  | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    | -      | - | - | -      | - | - |
| Critical Hdwy Stg 2  | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    | -      | - | - | -      | - | - |
| Follow-up Hdwy       | 3.52   | 4.02 | 3.32 | 3.52   | 4.02 | 3.32 | 2.22   | - | - | 2.22   | - | - |
| Pot Cap-1 Maneuver   | 11     | 5    | 415  | ~ 6    | 5    | 253  | 533    | - | - | 299    | - | - |
| Stage 1              | 141    | 198  | -    | ~ 46   | 82   | -    | -      | - | - | -      | - | - |
| Stage 2              | 190    | 82   | -    | 351    | 198  | -    | -      | - | - | -      | - | - |
| Platoon blocked, %   |        |      |      |        |      |      |        | - | - |        | - | - |
| Mov Cap-1 Maneuver   | ~ 4    | 3    | 415  | ~ 4    | 3    | 253  | 533    | - | - | 299    | - | - |
| Mov Cap-2 Maneuver   | ~ 4    | 3    | -    | ~ 4    | 3    | -    | -      | - | - | -      | - | - |
| Stage 1              | 107    | 151  | -    | ~ 35   | 62   | -    | -      | - | - | -      | - | - |
| Stage 2              | 69     | 62   | -    | 243    | 151  | -    | -      | - | - | -      | - | - |

| Approach             | EB       | WB         | NB  | SB  |
|----------------------|----------|------------|-----|-----|
| HCM Control Delay, s | \$ 484.2 | \$ 11156.3 | 0.8 | 1.1 |
| HCM LOS              | F        | F          |     |     |

| Minor Lane/Major Mvmt | NBL  | NBT | NBR | EBLn1     | EBLn2 | WBLn1  | WBLn2 | SBL   | SBT | SBR |
|-----------------------|------|-----|-----|-----------|-------|--------|-------|-------|-----|-----|
| Capacity (veh/h)      | 533  | -   | -   | 4         | 415   | 4      | 253   | 299   | -   | -   |
| HCM Lane V/C Ratio    | 0.24 | -   | -   | 2.5       | 0.093 | 41.429 | 0.519 | 0.237 | -   | -   |
| HCM Control Delay (s) | 13.9 | -   | -   | \$ 2303.8 | 14.0  | 9977.6 | 33.7  | 20.7  | -   | -   |
| HCM Lane LOS          | B    | -   | -   | F         | B     | F      | D     | C     | -   | -   |
| HCM 95th %tile Q(veh) | 0.9  | -   | -   | 2.3       | 0.3   | 22.9   | 2.7   | 0.9   | -   | -   |

| Notes                      |                        |                            |                                |  |  |  |  |  |  |  |
|----------------------------|------------------------|----------------------------|--------------------------------|--|--|--|--|--|--|--|
| ~: Volume exceeds capacity | \$: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |  |  |  |  |  |  |  |

| Intersection             |        |       |        |       |        |      |
|--------------------------|--------|-------|--------|-------|--------|------|
| Int Delay, s/veh         | 1      |       |        |       |        |      |
|                          |        |       |        |       |        |      |
| Movement                 | EBL    | EBR   | NBL    | NBT   | SBT    | SBR  |
| Vol, veh/h               | 1      | 52    | 95     | 2401  | 1711   | 10   |
| Conflicting Peds, #/hr   | 0      | 0     | 0      | 0     | 0      | 0    |
| Sign Control             | Stop   | Stop  | Free   | Free  | Free   | Free |
| RT Channelized           | -      | Yield | -      | Yield | -      | None |
| Storage Length           | 0      | 0     | 200    | -     | -      | 360  |
| Veh in Median Storage, # | 0      | -     | -      | 0     | 0      | -    |
| Grade, %                 | 0      | -     | -      | 1     | 0      | -    |
| Peak Hour Factor         | 71     | 71    | 99     | 99    | 98     | 98   |
| Heavy Vehicles, %        | 0      | 0     | 0      | 0     | 1      | 0    |
| Mvmt Flow                | 1      | 73    | 96     | 2425  | 1746   | 10   |
|                          |        |       |        |       |        |      |
| Major/Minor              | Minor2 |       | Major1 |       | Major2 |      |
| Conflicting Flow All     | 3151   | 874   | 1746   | 0     | -      | 0    |
| Stage 1                  | 1746   | -     | -      | -     | -      | -    |
| Stage 2                  | 1405   | -     | -      | -     | -      | -    |
| Critical Hdwy            | 6.8    | 6.9   | 4.1    | -     | -      | -    |
| Critical Hdwy Stg 1      | 5.8    | -     | -      | -     | -      | -    |
| Critical Hdwy Stg 2      | 5.8    | -     | -      | -     | -      | -    |
| Follow-up Hdwy           | 3.5    | 3.3   | 2.2    | -     | -      | -    |
| Pot Cap-1 Maneuver       | 9      | 297   | 364    | -     | -      | -    |
| Stage 1                  | 128    | -     | -      | -     | -      | -    |
| Stage 2                  | 196    | -     | -      | -     | -      | -    |
| Platoon blocked, %       |        |       |        | -     | -      | -    |
| Mov Cap-1 Maneuver       | 7      | 297   | 364    | -     | -      | -    |
| Mov Cap-2 Maneuver       | 7      | -     | -      | -     | -      | -    |
| Stage 1                  | 128    | -     | -      | -     | -      | -    |
| Stage 2                  | 144    | -     | -      | -     | -      | -    |
|                          |        |       |        |       |        |      |
| Approach                 | EB     |       | NB     |       | SB     |      |
| HCM Control Delay, s     | 32.3   |       | 0.7    |       | 0      |      |
| HCM LOS                  | D      |       |        |       |        |      |
|                          |        |       |        |       |        |      |
| Minor Lane/Major Mvmt    | NBL    | NBT   | EBLn1  | EBLn2 | SBT    | SBR  |
| Capacity (veh/h)         | 364    | -     | 7      | 297   | -      | -    |
| HCM Lane V/C Ratio       | 0.264  | -     | 0.201  | 0.247 | -      | -    |
| HCM Control Delay (s)    | 18.4   | -\$   | 620.4  | 21    | -      | -    |
| HCM Lane LOS             | C      | -     | F      | C     | -      | -    |
| HCM 95th %tile Q(veh)    | 1      | -     | 0.5    | 1     | -      | -    |

## Lanier Tract DRI

## 5: GA 53 &amp; Lanier Valley Dr/Ahaluna Dr

phase two p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Volume (vph)               | 23                                                                                | 1                                                                                 | 106                                                                               | 98                                                                                | 8                                                                                 | 64                                                                                | 198                                                                                 | 2041                                                                                | 114                                                                                 | 31                                                                                  | 1448                                                                                | 3                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 2%                                                                                |                                                                                   |                                                                                   | -4%                                                                               |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 100                                                                                 |                                                                                     | 0                                                                                   | 140                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.890                                                                             |                                                                                   |                                                                                   | 0.949                                                                             |                                                                                   |                                                                                     | 0.992                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   | 0.991                                                                             |                                                                                   |                                                                                   | 0.972                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1659                                                                              | 0                                                                                 | 0                                                                                 | 1788                                                                              | 0                                                                                 | 1796                                                                                | 3563                                                                                | 0                                                                                   | 1814                                                                                | 3592                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.906                                                                             |                                                                                   |                                                                                   | 0.612                                                                             |                                                                                   | 0.099                                                                               |                                                                                     |                                                                                     | 0.040                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1517                                                                              | 0                                                                                 | 0                                                                                 | 1126                                                                              | 0                                                                                 | 187                                                                                 | 3563                                                                                | 0                                                                                   | 76                                                                                  | 3592                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 119                                                                               |                                                                                   |                                                                                   | 17                                                                                |                                                                                   |                                                                                     | 10                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 340                                                                               |                                                                                   |                                                                                   | 322                                                                               |                                                                                   |                                                                                     | 1002                                                                                |                                                                                     |                                                                                     | 1457                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.7                                                                               |                                                                                   |                                                                                   | 7.3                                                                               |                                                                                   |                                                                                     | 15.2                                                                                |                                                                                     |                                                                                     | 22.1                                                                                |                                                                                     |
| Peak Hour Factor           | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 26                                                                                | 1                                                                                 | 119                                                                               | 109                                                                               | 9                                                                                 | 71                                                                                | 206                                                                                 | 2126                                                                                | 119                                                                                 | 32                                                                                  | 1508                                                                                | 3                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 146                                                                               | 0                                                                                 | 0                                                                                 | 189                                                                               | 0                                                                                 | 206                                                                                 | 2245                                                                                | 0                                                                                   | 32                                                                                  | 1511                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 |                                                                                     | 0                                                                                   | 336                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   |                                                                                     | 0                                                                                   | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 8                                                                                 | 8                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 10.6                                                                                | 23.0                                                                                |                                                                                     | 23.0                                                                                | 23.0                                                                                |                                                                                     |

# Lanier Tract DRI

## 5: GA 53 & Lanier Valley Dr/Ahaluna Dr

phase two p.m.

| Lane Group            | EBL   | EBT   | EBR | WBL   | WBT   | WBR | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
|-----------------------|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Total Split (s)       | 36.0  | 36.0  |     | 36.0  | 36.0  |     | 22.0  | 124.0 |     | 102.0 | 102.0 |     |
| Total Split (%)       | 22.5% | 22.5% |     | 22.5% | 22.5% |     | 13.8% | 77.5% |     | 63.8% | 63.8% |     |
| Maximum Green (s)     | 29.4  | 29.4  |     | 29.4  | 29.4  |     | 16.4  | 117.9 |     | 95.9  | 95.9  |     |
| Yellow Time (s)       | 4.0   | 4.0   |     | 4.0   | 4.0   |     | 3.0   | 4.5   |     | 4.5   | 4.5   |     |
| All-Red Time (s)      | 2.6   | 2.6   |     | 2.6   | 2.6   |     | 2.6   | 1.6   |     | 1.6   | 1.6   |     |
| Lost Time Adjust (s)  |       | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Lost Time (s)   |       | 6.6   |     |       | 6.6   |     | 5.6   | 6.1   |     | 6.1   | 6.1   |     |
| Lead/Lag              |       |       |     |       |       |     | Lead  |       |     | Lag   | Lag   |     |
| Lead-Lag Optimize?    |       |       |     |       |       |     | Yes   |       |     | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode           | None  | None  |     | None  | None  |     | None  | C-Max |     | C-Max | C-Max |     |
| Act Effect Green (s)  |       | 26.9  |     |       | 26.9  |     | 120.9 | 120.4 |     | 101.9 | 101.9 |     |
| Actuated g/C Ratio    |       | 0.17  |     |       | 0.17  |     | 0.76  | 0.75  |     | 0.64  | 0.64  |     |
| v/c Ratio             |       | 0.41  |     |       | 0.93  |     | 0.76  | 0.84  |     | 0.67  | 0.66  |     |
| Control Delay         |       | 17.7  |     |       | 106.1 |     | 36.4  | 15.3  |     | 86.6  | 20.9  |     |
| Queue Delay           |       | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay           |       | 17.7  |     |       | 106.1 |     | 36.4  | 15.3  |     | 86.6  | 20.9  |     |
| LOS                   |       | B     |     |       | F     |     | D     | B     |     | F     | C     |     |
| Approach Delay        |       | 17.7  |     |       | 106.1 |     |       | 17.0  |     |       | 22.3  |     |
| Approach LOS          |       | B     |     |       | F     |     |       | B     |     |       | C     |     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 129 (81%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 22.8

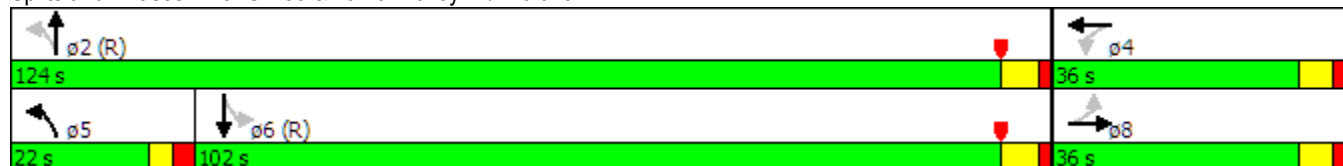
Intersection LOS: C

Intersection Capacity Utilization 96.3%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 5: GA 53 & Lanier Valley Dr/Ahaluna Dr



## Lanier Tract DRI

## 6: 53-Dawsonville Hwy &amp; Academy Sports

phase two p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |  |   |  |  |  |  |  |
| Volume (vph)               | 14                                                                                | 3                                                                                 | 66                                                                                | 130                                                                               | 8                                                                                 | 46                                                                                | 96                                                                                  | 2142                                                                                | 152                                                                                 | 21                                                                                  | 1503                                                                                | 30                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 4%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 70                                                                                | 200                                                                                 |                                                                                     | 170                                                                                 | 190                                                                                 |                                                                                     | 360                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1805                                                                              | 1900                                                                              | 1615                                                                              | 1769                                                                              | 1862                                                                              | 1583                                                                              | 1796                                                                                | 3592                                                                                | 1607                                                                                | 1805                                                                                | 3574                                                                                | 1615                                                                                |
| Flt Permitted              | 0.751                                                                             |                                                                                   |                                                                                   | 0.756                                                                             |                                                                                   |                                                                                   | 0.106                                                                               |                                                                                     |                                                                                     | 0.037                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1427                                                                              | 1900                                                                              | 1615                                                                              | 1408                                                                              | 1862                                                                              | 1583                                                                              | 200                                                                                 | 3592                                                                                | 1607                                                                                | 70                                                                                  | 3574                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 69                                                                                |                                                                                   |                                                                                   | 63                                                                                |                                                                                     |                                                                                     | 64                                                                                  |                                                                                     |                                                                                     | 64                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 262                                                                               |                                                                                   |                                                                                   | 246                                                                               |                                                                                   |                                                                                     | 1836                                                                                |                                                                                     |                                                                                     | 685                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.1                                                                               |                                                                                   |                                                                                   | 6.7                                                                               |                                                                                   |                                                                                     | 27.8                                                                                |                                                                                     |                                                                                     | 10.4                                                                                |                                                                                     |
| Peak Hour Factor           | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.80                                                                              | 0.80                                                                              | 0.80                                                                              | 0.98                                                                                | 0.98                                                                                | 0.98                                                                                | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 15                                                                                | 3                                                                                 | 69                                                                                | 162                                                                               | 10                                                                                | 58                                                                                | 98                                                                                  | 2186                                                                                | 155                                                                                 | 22                                                                                  | 1549                                                                                | 31                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 15                                                                                | 3                                                                                 | 69                                                                                | 162                                                                               | 10                                                                                | 58                                                                                | 98                                                                                  | 2186                                                                                | 155                                                                                 | 22                                                                                  | 1549                                                                                | 31                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 2                                                                                   |                                                                                     | 2                                                                                   | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 42.0                                                                              | 42.0                                                                              | 42.0                                                                              | 42.4                                                                              | 42.4                                                                              | 42.4                                                                              | 11.4                                                                                | 30.3                                                                                | 30.3                                                                                | 11.0                                                                                | 29.3                                                                                | 29.3                                                                                |

Synchro 8 Report

Marc R Acampora, PE, LLC



# Lanier Tract DRI

## 6: 53-Dawsonville Hwy & Academy Sports

phase two p.m.

| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Total Split (s)         | 42.4  | 42.4  | 42.4  | 42.4  | 42.4  | 42.4  | 16.6  | 106.6 | 106.6 | 11.0  | 101.0 | 101.0 |
| Total Split (%)         | 26.5% | 26.5% | 26.5% | 26.5% | 26.5% | 26.5% | 10.4% | 66.6% | 66.6% | 6.9%  | 63.1% | 63.1% |
| Maximum Green (s)       | 36.0  | 36.0  | 36.0  | 36.0  | 36.0  | 36.0  | 10.2  | 100.4 | 100.4 | 5.0   | 94.8  | 94.8  |
| Yellow Time (s)         | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 4.3   | 4.3   | 3.0   | 4.3   | 4.3   |
| All-Red Time (s)        | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 1.9   | 1.9   | 3.0   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.2   | 6.2   | 6.0   | 6.2   | 6.2   |
| Lead/Lag                |       |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None  | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 23.0  | 23.0  | 23.0  | 32.0  | 32.0  | 32.0  |       | 20.0  | 20.0  |       | 19.0  | 19.0  |
| Pedestrian Calls (#/hr) | 0     | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    | 23.7  | 23.7  | 23.7  | 23.7  | 23.7  | 23.7  | 121.5 | 116.4 | 116.4 | 115.5 | 109.4 | 109.4 |
| Actuated g/C Ratio      | 0.15  | 0.15  | 0.15  | 0.15  | 0.15  | 0.15  | 0.76  | 0.73  | 0.73  | 0.72  | 0.68  | 0.68  |
| v/c Ratio               | 0.07  | 0.01  | 0.23  | 0.78  | 0.04  | 0.20  | 0.42  | 0.84  | 0.13  | 0.19  | 0.63  | 0.03  |
| Control Delay           | 55.8  | 53.3  | 13.0  | 89.1  | 54.6  | 11.7  | 14.6  | 17.5  | 7.3   | 10.4  | 13.2  | 0.0   |
| Queue Delay             | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.1   | 0.0   |
| Total Delay             | 55.8  | 53.3  | 13.0  | 89.1  | 54.6  | 11.7  | 14.6  | 17.5  | 7.3   | 10.4  | 13.4  | 0.0   |
| LOS                     | E     | D     | B     | F     | D     | B     | B     | B     | A     | B     | B     | A     |
| Approach Delay          |       | 21.8  |       |       | 68.1  |       |       | 16.7  |       |       | 13.1  |       |
| Approach LOS            |       | C     |       |       | E     |       |       | B     |       |       | B     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 120 (75%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 145

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 18.2

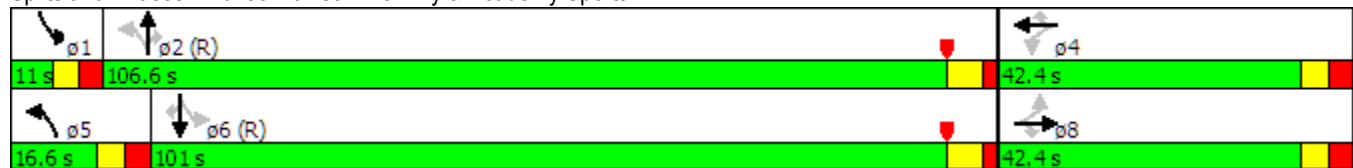
Intersection LOS: B

Intersection Capacity Utilization 92.7%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 6: 53-Dawsonville Hwy & Academy Sports



## Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 &amp; McEver Road/McEver

phase two p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |                                                                                   |   |  |  |  |  |  |
| Volume (vph)               | 996                                                                               | 235                                                                               | 426                                                                               | 96                                                                                | 100                                                                               | 93                                                                                | 478                                                                                 | 1632                                                                                | 51                                                                                  | 71                                                                                  | 1249                                                                                | 594                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 1%                                                                                |                                                                                   |                                                                                   | 5%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 180                                                                               |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 310                                                                                 |                                                                                     | 185                                                                                 | 255                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 50                                                                                |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.951                                                                             | 0.850                                                                             |                                                                                   | 0.928                                                                             |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 3484                                                                              | 1708                                                                              | 1527                                                                              | 1760                                                                              | 1719                                                                              | 0                                                                                 | 3484                                                                                | 3592                                                                                | 1607                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   | 0.432                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 3484                                                                              | 1708                                                                              | 1527                                                                              | 800                                                                               | 1719                                                                              | 0                                                                                 | 3484                                                                                | 3592                                                                                | 1607                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 18                                                                                | 302                                                                               |                                                                                   | 28                                                                                |                                                                                   |                                                                                     |                                                                                     | 172                                                                                 |                                                                                     |                                                                                     | 323                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 580                                                                               |                                                                                   |                                                                                   | 331                                                                               |                                                                                   |                                                                                     | 921                                                                                 |                                                                                     |                                                                                     | 1504                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 8.8                                                                               |                                                                                   |                                                                                   | 9.0                                                                               |                                                                                   |                                                                                     | 14.0                                                                                |                                                                                     |                                                                                     | 22.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.86                                                                              | 0.86                                                                              | 0.86                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 1048                                                                              | 247                                                                               | 448                                                                               | 112                                                                               | 116                                                                               | 108                                                                               | 493                                                                                 | 1682                                                                                | 53                                                                                  | 78                                                                                  | 1373                                                                                | 653                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   | 27%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 1048                                                                              | 368                                                                               | 327                                                                               | 112                                                                               | 224                                                                               | 0                                                                                 | 493                                                                                 | 1682                                                                                | 53                                                                                  | 78                                                                                  | 1373                                                                                | 653                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 24                                                                                |                                                                                   |                                                                                   | 24                                                                                |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                             | NA                                                                                |                                                                                   | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 8                                                                                 |                                                                                   | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 8                                                                                 | 8                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 13.2                                                                              | 50.2                                                                              | 50.2                                                                              | 11.6                                                                              | 48.2                                                                              |                                                                                   | 13.4                                                                                | 35.6                                                                                | 35.6                                                                                | 12.9                                                                                | 44.6                                                                                | 44.6                                                                                |

Lanier Tract DRI

8: Dawsonville Highway/GA 53 & McEver Road/McEver

phase two p.m.

| Lane Group              | EBL   | EBT   | EBR   | WBL  | WBT   | WBR | NBL   | NBT   | NBR   | SBL  | SBT   | SBR   |
|-------------------------|-------|-------|-------|------|-------|-----|-------|-------|-------|------|-------|-------|
| Total Split (s)         | 34.0  | 68.2  | 68.2  | 14.0 | 48.2  |     | 22.0  | 64.8  | 64.8  | 13.0 | 55.8  | 55.8  |
| Total Split (%)         | 21.3% | 42.6% | 42.6% | 8.8% | 30.1% |     | 13.8% | 40.5% | 40.5% | 8.1% | 34.9% | 34.9% |
| Maximum Green (s)       | 26.7  | 60.9  | 60.9  | 7.5  | 40.9  |     | 14.5  | 58.2  | 58.2  | 5.8  | 49.2  | 49.2  |
| Yellow Time (s)         | 4.3   | 4.3   | 4.3   | 3.5  | 4.3   |     | 4.5   | 4.4   | 4.4   | 4.2  | 4.4   | 4.4   |
| All-Red Time (s)        | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 2.2   | 2.2   | 3.0  | 2.2   | 2.2   |
| Lost Time Adjust (s)    | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Lost Time (s)     | 7.3   | 7.3   | 7.3   | 6.5  | 7.3   |     | 7.5   | 6.6   | 6.6   | 7.2  | 6.6   | 6.6   |
| Lead/Lag                | Lead  | Lag   | Lag   | Lead | Lag   |     | Lag   | Lag   | Lag   | Lead | Lead  | Lead  |
| Lead-Lag Optimize?      | Yes   | Yes   | Yes   | Yes  | Yes   |     | Yes   | Yes   | Yes   | Yes  | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   |
| Recall Mode             | None  | None  | None  | None | None  |     | None  | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s)           |       | 4.0   | 4.0   |      | 4.0   |     |       | 4.0   | 4.0   |      | 4.0   | 4.0   |
| Flash Dont Walk (s)     |       | 38.0  | 38.0  |      | 36.0  |     |       | 25.0  | 25.0  |      | 34.0  | 34.0  |
| Pedestrian Calls (#/hr) |       | 0     | 0     |      | 0     |     |       | 0     | 0     |      | 0     | 0     |
| Act Effect Green (s)    | 26.7  | 43.9  | 43.9  | 32.2 | 23.9  |     | 14.5  | 65.6  | 65.6  | 15.4 | 66.2  | 66.2  |
| Actuated g/C Ratio      | 0.17  | 0.27  | 0.27  | 0.20 | 0.15  |     | 0.09  | 0.41  | 0.41  | 0.10 | 0.41  | 0.41  |
| v/c Ratio               | 1.80  | 0.77  | 0.51  | 0.54 | 0.80  |     | 1.57  | 1.14  | 0.07  | 0.45 | 0.92  | 0.76  |
| Control Delay           | 403.8 | 61.1  | 8.7   | 47.9 | 77.3  |     | 313.6 | 125.0 | 0.1   | 65.4 | 68.6  | 41.7  |
| Queue Delay             | 0.0   | 58.4  | 3.3   | 32.9 | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.3   | 0.0   |
| Total Delay             | 403.8 | 119.4 | 12.1  | 80.8 | 77.3  |     | 313.6 | 125.0 | 0.1   | 65.4 | 68.8  | 41.7  |
| LOS                     | F     | F     | B     | F    | E     |     | F     | F     | A     | E    | E     | D     |
| Approach Delay          |       | 270.3 |       |      | 78.5  |     |       | 163.8 |       |      | 60.3  |       |
| Approach LOS            |       | F     |       |      | E     |     |       | F     |       |      | E     |       |

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 52 (33%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.80

Intersection Signal Delay: 154.3

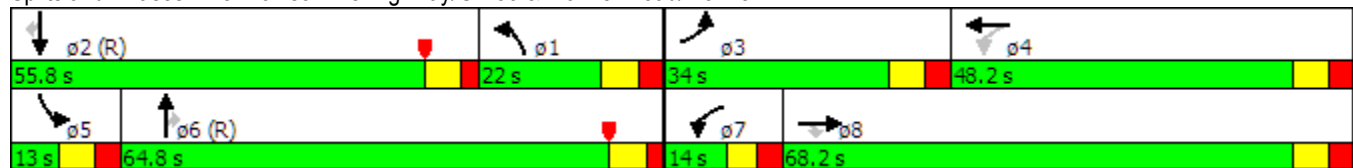
Intersection LOS: F

Intersection Capacity Utilization 112.3%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 8: Dawsonville Highway/GA 53 & McEver Road/McEver



## Lanier Tract DRI

## 9: Dawsonville Highway &amp; Greenhill Circle/Greenhill Circle

phase two p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 146                                                                               | 10                                                                                | 152                                                                               | 66                                                                                | 22                                                                                | 42                                                                                | 274                                                                                 | 2059                                                                                | 77                                                                                  | 44                                                                                  | 1650                                                                                | 59                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 3%                                                                                |                                                                                   |                                                                                   | 7%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 190                                                                                 |                                                                                     | 190                                                                                 | 185                                                                                 |                                                                                     | 100                                                                                 |
| Storage Lanes              | 0                                                                                 |                                                                                   | 1                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              |                                                                                   | 0.955                                                                             |                                                                                   |                                                                                   | 0.964                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1787                                                                              | 1591                                                                              | 0                                                                                 | 1767                                                                              | 1558                                                                              | 1796                                                                                | 3592                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   | 0.591                                                                             |                                                                                   |                                                                                   | 0.482                                                                             |                                                                                   | 0.042                                                                               |                                                                                     |                                                                                     | 0.044                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1106                                                                              | 1591                                                                              | 0                                                                                 | 884                                                                               | 1558                                                                              | 79                                                                                  | 3592                                                                                | 1607                                                                                | 84                                                                                  | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 167                                                                               |                                                                                   |                                                                                   | 95                                                                                |                                                                                     |                                                                                     | 54                                                                                  |                                                                                     |                                                                                     | 95                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 288                                                                               |                                                                                   |                                                                                   | 254                                                                               |                                                                                   |                                                                                     | 778                                                                                 |                                                                                     |                                                                                     | 921                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.9                                                                               |                                                                                   |                                                                                   | 6.9                                                                               |                                                                                   |                                                                                     | 11.8                                                                                |                                                                                     |                                                                                     | 14.0                                                                                |                                                                                     |
| Peak Hour Factor           | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.78                                                                              | 0.78                                                                              | 0.78                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 160                                                                               | 11                                                                                | 167                                                                               | 85                                                                                | 28                                                                                | 54                                                                                | 282                                                                                 | 2123                                                                                | 79                                                                                  | 46                                                                                  | 1737                                                                                | 62                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 171                                                                               | 167                                                                               | 0                                                                                 | 113                                                                               | 54                                                                                | 282                                                                                 | 2123                                                                                | 79                                                                                  | 46                                                                                  | 1737                                                                                | 62                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.02                                                                              | 1.02                                                                              | 1.02                                                                              | 1.05                                                                              | 1.05                                                                              | 1.05                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              | 23.0                                                                              | 39.9                                                                              | 39.9                                                                              | 39.9                                                                              | 11.0                                                                                | 28.0                                                                                | 28.0                                                                                | 10.0                                                                                | 36.0                                                                                | 36.0                                                                                |

# Lanier Tract DRI

## 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle

phase two p.m.

|                         |  |       |       |       |       |       |       |       |       |      |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL  | SBT   | SBR   |
| Total Split (s)         | 39.9                                                                               | 39.9  | 39.9  | 39.9  | 39.9  | 39.9  | 31.0  | 110.1 | 110.1 | 10.0 | 89.1  | 89.1  |
| Total Split (%)         | 24.9%                                                                              | 24.9% | 24.9% | 24.9% | 24.9% | 24.9% | 19.4% | 68.8% | 68.8% | 6.3% | 55.7% | 55.7% |
| Maximum Green (s)       | 34.0                                                                               | 34.0  | 34.0  | 34.0  | 34.0  | 34.0  | 25.0  | 104.1 | 104.1 | 5.0  | 83.1  | 83.1  |
| Yellow Time (s)         | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 4.4   | 4.4   | 3.5  | 4.4   | 4.4   |
| All-Red Time (s)        | 2.9                                                                                | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 3.0   | 1.6   | 1.6   | 1.5  | 1.6   | 1.6   |
| Lost Time Adjust (s)    |                                                                                    | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Lost Time (s)     |                                                                                    | 5.9   | 5.9   |       | 5.9   | 5.9   | 6.0   | 6.0   | 6.0   | 5.0  | 6.0   | 6.0   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes  | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s)           |                                                                                    |       |       | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |      | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    |       |       | 30.0  | 30.0  | 30.0  |       | 18.0  | 18.0  |      | 26.0  | 26.0  |
| Pedestrian Calls (#/hr) |                                                                                    |       |       | 0     | 0     | 0     |       | 0     | 0     |      | 0     | 0     |
| Act Effect Green (s)    |                                                                                    | 28.1  | 28.1  |       | 28.1  | 28.1  | 120.0 | 111.5 | 111.5 | 96.9 | 90.3  | 90.3  |
| Actuated g/C Ratio      |                                                                                    | 0.18  | 0.18  |       | 0.18  | 0.18  | 0.75  | 0.70  | 0.70  | 0.61 | 0.56  | 0.56  |
| v/c Ratio               |                                                                                    | 0.88  | 0.40  |       | 0.73  | 0.15  | 0.90  | 0.85  | 0.07  | 0.41 | 0.85  | 0.07  |
| Control Delay           |                                                                                    | 103.0 | 9.8   |       | 87.7  | 1.7   | 58.2  | 30.6  | 5.2   | 23.9 | 58.8  | 11.5  |
| Queue Delay             |                                                                                    | 0.0   | 5.9   |       | 87.6  | 0.0   | 0.0   | 46.9  | 0.0   | 0.0  | 3.2   | 0.0   |
| Total Delay             |                                                                                    | 103.0 | 15.7  |       | 175.3 | 1.7   | 58.2  | 77.5  | 5.2   | 23.9 | 62.0  | 11.5  |
| LOS                     |                                                                                    | F     | B     |       | F     | A     | E     | E     | A     | C    | E     | B     |
| Approach Delay          |                                                                                    | 59.8  |       |       | 119.2 |       |       | 73.0  |       |      | 59.3  |       |
| Approach LOS            |                                                                                    | E     |       |       | F     |       |       | E     |       |      | E     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 68.5

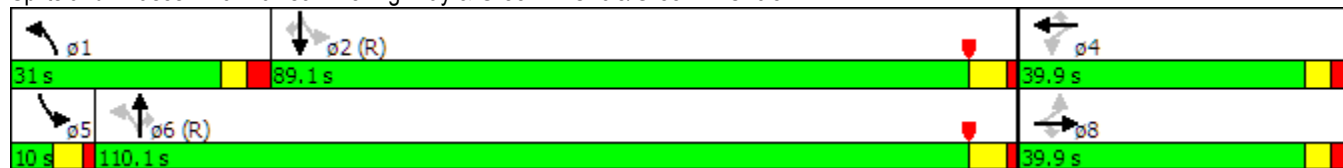
Intersection LOS: E

Intersection Capacity Utilization 91.0%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle



## Lanier Tract DRI

## 10: Dawsonville Highway &amp; Shallowford Rd/Best Buy

phase two p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |                                                                                   |  |  |   |  |  |  |  |  |
| Volume (vph)               | 596                                                                               | 42                                                                                | 29                                                                                | 40                                                                                | 30                                                                                | 8                                                                                 | 44                                                                                  | 1914                                                                                | 126                                                                                 | 8                                                                                   | 1375                                                                                | 531                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | -1%                                                                               |                                                                                   |                                                                                   | 10%                                                                               |                                                                                   |                                                                                     | -4%                                                                                 |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 350                                                                               |                                                                                   | 350                                                                               | 0                                                                                 |                                                                                   | 0                                                                                 | 350                                                                                 |                                                                                     | 150                                                                                 | 265                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 100                                                                               |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             | 0.958                                                                             |                                                                                   |                                                                                   | 0.972                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1723                                                                              | 1738                                                                              | 1623                                                                              | 0                                                                                 | 1754                                                                              | 1534                                                                              | 1841                                                                                | 3682                                                                                | 1647                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             | 0.958                                                                             |                                                                                   |                                                                                   | 0.972                                                                             |                                                                                   | 0.064                                                                               |                                                                                     |                                                                                     | 0.047                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1723                                                                              | 1738                                                                              | 1623                                                                              | 0                                                                                 | 1754                                                                              | 1534                                                                              | 124                                                                                 | 3682                                                                                | 1647                                                                                | 90                                                                                  | 3628                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 106                                                                               |                                                                                   |                                                                                   | 111                                                                               |                                                                                     |                                                                                     | 65                                                                                  |                                                                                     |                                                                                     | 311                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 653                                                                               |                                                                                   |                                                                                   | 178                                                                               |                                                                                   |                                                                                     | 1046                                                                                |                                                                                     |                                                                                     | 778                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 9.9                                                                               |                                                                                   |                                                                                   | 4.9                                                                               |                                                                                   |                                                                                     | 15.8                                                                                |                                                                                     |                                                                                     | 11.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.94                                                                                | 0.94                                                                                | 0.94                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 662                                                                               | 47                                                                                | 32                                                                                | 45                                                                                | 34                                                                                | 9                                                                                 | 47                                                                                  | 2036                                                                                | 134                                                                                 | 9                                                                                   | 1511                                                                                | 584                                                                                 |
| Shared Lane Traffic (%)    | 47%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 351                                                                               | 358                                                                               | 32                                                                                | 0                                                                                 | 79                                                                                | 9                                                                                 | 47                                                                                  | 2036                                                                                | 134                                                                                 | 9                                                                                   | 1511                                                                                | 584                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 0.99                                                                              | 0.99                                                                              | 0.99                                                                              | 1.07                                                                              | 1.07                                                                              | 1.07                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Split                                                                             | NA                                                                                | Perm                                                                              | Split                                                                             | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | Perm                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 3                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 3                                                                                 | 3                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 36.7                                                                              | 36.7                                                                              | 36.7                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                                | 28.8                                                                                | 28.8                                                                                | 30.8                                                                                | 30.8                                                                                | 30.8                                                                                |

# Lanier Tract DRI

## 10: Dawsonville Highway & Shallowford Rd/Best Buy

phase two p.m.

| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL  | NBT   | NBR   | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|
| Total Split (s)         | 37.0  | 37.0  | 37.0  | 38.9  | 38.9  | 38.9  | 10.8 | 84.1  | 84.1  | 73.3  | 73.3  | 73.3  |
| Total Split (%)         | 23.1% | 23.1% | 23.1% | 24.3% | 24.3% | 24.3% | 6.8% | 52.6% | 52.6% | 45.8% | 45.8% | 45.8% |
| Maximum Green (s)       | 30.3  | 30.3  | 30.3  | 33.0  | 33.0  | 33.0  | 5.0  | 77.3  | 77.3  | 66.5  | 66.5  | 66.5  |
| Yellow Time (s)         | 4.5   | 4.5   | 4.5   | 3.0   | 3.0   | 3.0   | 3.0  | 4.9   | 4.9   | 4.9   | 4.9   | 4.9   |
| All-Red Time (s)        | 2.2   | 2.2   | 2.2   | 2.9   | 2.9   | 2.9   | 2.8  | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.7   | 6.7   | 6.7   |       | 5.9   | 5.9   | 5.8  | 6.8   | 6.8   | 6.8   | 6.8   | 6.8   |
| Lead/Lag                | Lead  | Lead  | Lead  | Lag   | Lag   | Lag   | Lead |       |       | Lag   | Lag   | Lag   |
| Lead-Lag Optimize?      | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes  |       |       | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None  | None  | None  | None  | None  | None  | None | C-Min | C-Min | C-Min | C-Min | C-Min |
| Walk Time (s)           | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 26.0  | 26.0  | 26.0  | 29.0  | 29.0  | 29.0  |      | 18.0  | 18.0  | 20.0  | 20.0  | 20.0  |
| Pedestrian Calls (#/hr) | 0     | 0     | 0     | 0     | 0     | 0     |      | 0     | 0     | 0     | 0     | 0     |
| Act Effect Green (s)    | 30.3  | 30.3  | 30.3  |       | 12.6  | 12.6  | 98.7 | 97.7  | 97.7  | 87.1  | 87.1  | 87.1  |
| Actuated g/C Ratio      | 0.19  | 0.19  | 0.19  |       | 0.08  | 0.08  | 0.62 | 0.61  | 0.61  | 0.54  | 0.54  | 0.54  |
| v/c Ratio               | 1.08  | 1.09  | 0.08  |       | 0.57  | 0.04  | 0.31 | 0.91  | 0.13  | 0.19  | 0.77  | 0.57  |
| Control Delay           | 130.7 | 133.6 | 0.4   |       | 86.5  | 0.4   | 18.2 | 34.6  | 7.5   | 55.5  | 56.2  | 34.0  |
| Queue Delay             | 1.2   | 1.2   | 0.0   |       | 0.0   | 0.0   | 0.0  | 46.4  | 0.0   | 0.0   | 36.0  | 0.8   |
| Total Delay             | 131.9 | 134.9 | 0.4   |       | 86.5  | 0.4   | 18.2 | 81.0  | 7.5   | 55.5  | 92.2  | 34.9  |
| LOS                     | F     | F     | A     |       | F     | A     | B    | F     | A     | E     | F     | C     |
| Approach Delay          |       | 127.7 |       |       | 77.7  |       |      | 75.2  |       |       | 76.1  |       |
| Approach LOS            |       | F     |       |       | E     |       |      | E     |       |       | E     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 91 (57%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.09

Intersection Signal Delay: 83.2

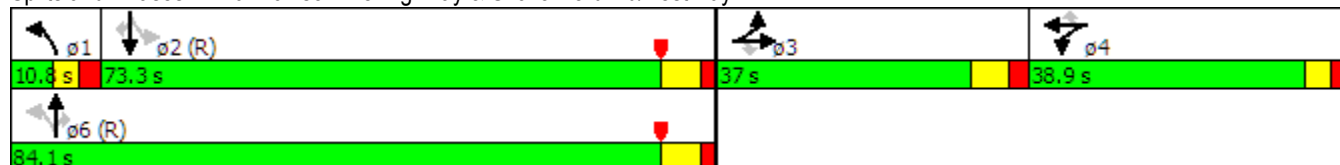
Intersection LOS: F

Intersection Capacity Utilization 90.9%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 10: Dawsonville Highway & Shallowford Rd/Best Buy





Harbour Point Community Association  
3313 Harbour Point Parkway  
Gainesville, Georgia 30506  
April 25, 2017

Subject: Oak Hall Development

Mayor Danny Dunagan  
300 Henry Ward Way  
Suite 303  
P.O. Box 2496  
Gainesville, Georgia 30501

Dear Mayor Dunagan:

My name is Gary Lawrence and I currently serve as the President of the Harbour Point Community Association Board. Harbour Point is a Community of 290 households located on Route 53, about 5.5 miles west of the proposed Oak Hall Development on Ahaluna Drive. Our Board recently received a presentation on this Development and has the following concerns.

1 Our residents are currently experiencing significant delays in exiting our Community onto Route 53. These delays occur not only during rush hours but throughout the day, 7 days a week. GDOT has reported a growth of more than 2000 vehicles a day that pass our entrance from 2015 to 2016, due to the widening project and the many new businesses located in the corridor. This traffic is projected to grow regardless of any new development. Many of our residents are avoiding the traffic congestion enroute to Gainesville, by turning west and doing their shopping in Dawsonville.

2 The traffic in this already congested corridor will be exacerbated by the Oak Hall Development. The GPAB had cancelled a March 7 Public Hearing due the lack of current traffic data to assess the impact of traffic from this Development. A traffic study by Arcadis Consulting was commissioned to gather the needed data. The result of the study is currently planned for mid to late May. In their haste to obtain project approval, the GPAB has now scheduled the hearing for May 9, which will not allow adequate time for the appropriate review of the study's findings and the development of traffic remediation efforts needed to approve the development.



3        There appears to be no plan to reprioritize traffic enhancement Tier 2 projects to Tier 1 status to address the immediate need for something to be done in time for the Oak Hall Development. We perceive that the current plan is to approve the project and then to worry about the resultant traffic congestion later. We contend that the City and County should at least have a plan for traffic remediation and controlling signal light sequences, but that will not be enough. We need additional lane capacity and turning lanes, etc. before the project comes on line.

4        Harbour Point certainly understands the value of new development and the need for additional affordable housing for our beautiful City of Gainesville. To approve the project without having a clear understanding of potential traffic problems and a short term plan to address these issues is dangerous for the overall image and livability of Gainesville. We recommend that the Developer, GDOT and all of the other parties develop a traffic remediation plan and locate the monies to make it happen before the project is approved.

As Mayor of our great City, I ask that you have the steps required for the approval of this Development sequenced appropriately, so that we are in front of the problem with new roadway capacity and not scrambling after the congestion is upon us. Thank you for your attention to this important issue.

Sincerely,

Gary Lawrence

cc:    Bryan Lackey, City Manager  
      City Council  
      GPAB Members

REVISED 2017-01-27

**RESERVATION OF CONSTITUTIONAL AND LEGAL RIGHTS - ANNEXATION**

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Applicant:</b>           | <b>Oak Hall Companies, LLC</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Annexation Property:</b> | <b>50.81 Acres Designated as Hall County Tax Parcel(s): See Attached</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Current Zoning:</b>      | <b>AR-III, H-B, &amp; R-II</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Proposed Zoning:</b>     | <b>PUD &amp; G-B</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Proposed Use:</b>        | <b>Mixed-Use development, consisting of:</b> <ul style="list-style-type: none"><li>▪ <b>820 age-restricted, independent living, assisted living, and memory care residences</b></li><li>▪ <b>Approximately 24,000 sf of restaurant, retail, office</b></li><li>▪ <b>Approximately 40,000 sf of storage</b></li><li>▪ <b>Approximately 10,650 sf public/semi-public use (Fire Station)</b></li><li>▪ <b>7 commercial outparcels with approximately 8,000 sf average per parcel of Office/Retail/Restaurant</b></li></ul> |
| <b>ROW Access:</b>          | <b>Dawsonville Hwy (SR53)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

This Reservation of Constitutional and Other Legal Rights ("the Reservation") is intended to supplement and form a part of the annexation and rezoning application (including any request for zoning, conditional use permit and variances)(the "Application") of the Applicant and the owners of the Subject Property and to put the City of Gainesville on notice of the Applicant's assertion of its constitutional and legal rights.

The Applicant has filed a timely application, has provided all required information and has submitted the appropriate application fees. The application meets all judicial and statutory requirements for approval.

A refusal by the City of Gainesville to approve the Application, as requested by the Applicant, will impose a disproportionate hardship on the Applicant and owners of the Subject Property without benefiting any surrounding property owners. There is no reasonable use of the Subject Property under any other zoning classification and no resulting benefit to the public from designation to any other classification.

A refusal by the City of Gainesville to approve the Application, as requested by the Applicant, will prohibit the only viable economic use of the Subject Property, will constitute an illegal taking of the Applicant's and owners' properties, and will be unconstitutional and will discriminate in an arbitrary, capricious and unreasonable manner between the Applicant and owner and the owners of similarly

Page 2 of 2  
January 27, 2017

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situated properties in violation of the Georgia Constitution of 1983, as amended and the Constitution of the United States.

Furthermore, this Reservation also constitutes an Ante Litem Notice pursuant to O.C.G.A. § 36-11-1, which places the City of Gainesville and all other agents of the City on notice of the Applicant's and owners' intent to seek monetary damages and attorney's fees against the City of Gainesville for any rezoning action, zoning condition, illegal impact fee and any other unlawful restrictions and exactions that are imposed on the Subject Property, the Applicant and the owners.

Finally, this Reservation also constitutes an Ante Litem Notice pursuant to O.C.G.A. § 36-11-1, which places Hall County and any third parties on notice of the Applicant's and owners' intent to defend any action intended to thwart the annexation of the Subject Property into the City of Gainesville.

By filing this Reservation, the Applicant reserves all rights and remedies available to it under the United States Constitution, the Georgia Constitution, all applicable federal, state, and local laws and ordinances, and in equity, against all persons and entities.

The Applicant and owners respectfully request that this Application be approved as requested by the Applicant and in the manner shown on the Application, which is incorporated herein by reference. This Reservation forms an integral part of the Application, and we ask that the City of Gainesville include this Reservation with the Applicant's other application documents. The Applicant and owners reserve the right to amend and supplement this Reservation at any time.

Sincerely,



Ethan Underwood,  
Attorney for the Applicant

# CITY OF GAINESVILLE

## AGENDA REQUEST

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**Date Submitted:** 4/25/2017

**Presenter:** Matt Tate

**Item of Business:** Request from **Oak Hall Companies, LLC** to rezone a 157.98± acres tract located on the east side of Dawsonville Highway (S.R. 53), having road frontage on Ahaluna Drive, Skyview Drive, Strickland Drive, Lakeshore Circle, West Lake Drive and Karen Lane (a/k/a **0, 1264 and 1817 Ahaluna Drive; 1876 Dawsonville Highway; 2208 Karen Lane; 0 and 2029 Strickland Drive; 0 and 1489 West Lake Drive**) from Residential-I-A (R-I-A), Residential-I (R-I), Planned Unit Development (P-U-D) and Regional Business (R-B) to Planned Unit Development (P-U-D) and General Business (G-B).  
Ward Number: One  
Tax Parcel Number(s): 00-109B-000-003A; 00-110-000-001, 006, 030, 031, 034, 035, 036, 037 and 038;  
01-110-001-006; 01-110A-004-022; 01-114-001-001, 026, 145  
and 161  
Request: Mixed-use development

**Meeting Date:** 5/9/2017

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**Purpose of Request:**

The applicant is proposing to rezone the subject property with a zoning of Planned Unit Development (P-U-D) and is to be included as part of the previously described 208.79± acres proposed mixed-use development. The property contains mostly undeveloped land with the exception of four single-family homes.

**History/Background:**

All three **Oak Hall Companies, LLC** agenda items were tabled at the March 14, 2017 PAB meeting after staff reviewed the requests and determined that the applicant needed to provide additional traffic data prior to staff giving an official recommendation. Therefore, PAB tabled the items for a period of 60-days to be scheduled for the May 9, 2017 Planning and Appeals Board meeting.

**Facts & Issues for Consideration:**

**Department Recommendation:**

Planning staff is recommending approval with twenty-four conditions.

**Department Director:**

Rusty Ligon

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**If funding is involved, are funds approved within the current budget?**

N/A

**Amount Requested:**

**Source of Funds:**

**Finance Comments:**

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**Administrative Comments:**

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**ATTACHMENTS:**

| Description                            | Type            |
|----------------------------------------|-----------------|
| <input type="checkbox"/> Staff Report  | Report          |
| <input type="checkbox"/> Location Maps | Backup Material |

|   |                                      |                 |
|---|--------------------------------------|-----------------|
| ▣ | Narrative                            | Backup Material |
| ▣ | Survey                               | Backup Material |
| ▣ | Concept Plan                         | Backup Material |
| ▣ | Elevations and Floor Plans           | Backup Material |
| ▣ | Traffic Impact Study                 | Backup Material |
| ▣ | Letter of Opposition                 | Backup Material |
| ▣ | Reservation of Constitutional Rights | Backup Material |

**GAINESVILLE PLANNING and APPEALS BOARD  
STAFF RECOMMENDATION**

**Applicant** ..... Oak Hall Companies, LLC

**Property Owners** ..... America's Home Place, Inc.; West Ahaluna, LLC; Barry Conner, LLC; Soque, LLC; Olen Stephens

**Location** ..... See below

**Request** ..... Annex 50.81<sup>±</sup> acres with Planned Unit Development (PUD) and General Business (G-B) zoning

**Request** ..... Rezone 157.98<sup>±</sup> acres from Residential-I-A (R-I-A), Residential-I (R-I), Planned Unit Development (P-U-D) and Regional Business (R-B) to Planned Unit Development (P-U-D) and General Business (G-B)

**Total Acres** ..... 208.79<sup>±</sup> acres total

**Ward** ..... One

**Proposed Use** ..... Mixed-use, age-restricted community

**Planning Division Staff Recommendation** ..... **Approval, with conditions**

**Date** ..... May 9, 2017

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▪ **Location**

50.81<sup>±</sup> acres annexation - 0 and 1758 Ahaluna Drive; 1508, 1550, 1740, 1746, 1758, 1760, 1934 and 1982 Dawsonville Highway; 300 and 301 Skyview Drive; 0, 2008 and 2016 Strickland Drive

157.98<sup>±</sup> acres rezoning - 0, 1264 and 1817 Ahaluna Drive; 1876 Dawsonville Highway; 2208 Karen Lane; 0 and 2029 Strickland Drive; 0 and 1489 West Lake Drive

▪ **Applicant's Proposal and Background Information**

A 110.9<sup>±</sup> acres portion of the subject property was annexed and rezoned in 2014 and 2015 to Planned Unit Development (P-U-D) and Residential-I-A (R-I-A) with conditions for a 199 lot single-family subdivision. The applicant at that time was West Ahaluna, LLC and the property has remained undeveloped.

The current proposal includes the annexation of 50.81<sup>±</sup> acres and the rezoning of 157.98<sup>±</sup> acres for a total of 208.79<sup>±</sup> acres. Of the total acreage, 185.02<sup>±</sup> acres will be zoned Planned Unit Development (P-U-D) and 23.77<sup>±</sup> acres zoned as General Business (G-B). Because the proposal is a master planned mixed-use development, both the annexation and rezoning requests are being presented together.

The subject 50.81<sup>±</sup> acres portion of property is being considered for annexation with a zoning of Planned Unit Development (P-U-D) and General Business (G-B). The property is currently zoned Agricultural Residential-III (AR-III), Residential-II (R-II) and Highway Business (H-B) within

unincorporated Hall County. Of the 50.81<sup>±</sup> acres, approximately 30.80<sup>±</sup> acres will be zoned P-U-D and 20.01<sup>±</sup> acres will be zoned G-B. The city limits are contiguous to the subject property to the north, south, east and west. The property contains numerous residential and commercial structures, out buildings and a cellular tower and has road frontage on Ahaluna Drive, Dawsonville Highway, Strickland Drive and Skyview Drive.

The subject 157.98<sup>±</sup> acres portion of property is being considered for rezoning from Residential-I-A (R-I-A), Residential-I (R-I), Planned Unit Development (P-U-D) and Regional Business (R-B) to Planned Unit Development (P-U-D) and General Business (G-B). This property is currently located within the city limits. Of the 157.98<sup>±</sup> acres, approximately 154.22<sup>±</sup> acres will be zoned P-U-D and 3.76<sup>±</sup> acres will be zoned G-B. The property contains mostly undeveloped land with the exception of four single-family homes and has road frontage on Ahaluna Drive, Dawsonville Highway, Karen Lane, Strickland Drive and West Lake Drive, and is west of the terminus of Lakeshore Circle.

The development proposes a master planned development designed as an “age in place” community. The applicant anticipates the residential portion of the development will be built-out over a period of 6 years from when the first land development permit is issued. The office and commercial component of the development will be constructed upon market conditions. A total of 790 residential units are proposed that will comply with applicable U. S. Department of Housing and Urban Development (HUD) rules for age-restricted communities. The mixture of housing proposed includes: 305 single-family detached homes; 79 single-family cottages; 81 detached terrace homes; 175 independent living units and 150 assisted living units which could include up to 30 memory care units. Therefore, 37% of the overall residential units for the entire development are located within the independent and assisted living facilities. Amenities are to consist of a swimming pool, club house, passive park and two community docks totaling 130 boat slips. A total of 68.0 acres or 37% of the development will be open green space.

Non-residential uses are to include a 40,000 square foot storage facility for residents within the community, 24,000 square feet of retail/office/restaurant space, seven commercial parcels each having approximately 8,000 square feet of building space and a 3.0 acres tract of land reserved for a 10,650<sup>±</sup> square foot fire station. Access is proposed from Dawsonville Highway, Ahaluna Drive and Strickland Drive. Some of the proposed development standards are listed below. A full description is provided with the application.

#### Residential

- Proposed Density: 4.43 units/acre
- Average home price: Single-family- \$400,000 to \$700,000; Terrace homes- \$300,000; Cottages- High \$200,000; Independent Living- \$2,800 to \$4,000 per month.
- Proposed Minimum House Size: 1,500 square feet of heated floor space for single-family detached homes; 500 square feet of heated floor space for single-family cottages; and 1,100 square feet attached / detached terrace homes.
- Building Materials: No vinyl or aluminum siding allowed. Exterior facade may include brick, stone, hard coat stucco, hardiboard or a combination thereof. Accent material such as copper roofing, cedar shake, hardiboard or a combination of such materials may be used not to exceed 50% of the facade. Roofing materials may include cedar shake, architectural shingles or metal as appropriate to the architectural style of each home.
- Lot Width: Single-family detached homes - 40 feet (83<sup>±</sup> lots); 50 feet (126<sup>±</sup>-lots); 60 feet (56<sup>±</sup> lots); 80 feet (40<sup>±</sup> lots).
- Unit Width: Cottage homes- Minimum 15 feet, Terrace homes- Minimum 24 feet.
- Maximum Height: Single-family detached- 40-feet; Cottage homes and Terrace homes- 30-feet; Independent Living, Assisted Living and Memory Care- 75-feet.

- Setbacks: Each unit will have a minimum of 18-feet of driveway from the back of the sidewalk to the building face or 20-feet from the back of the curb when there is no sidewalk.  
Single-family detached- Front: 15-feet; Side: 3-feet; Rear interior lot: 10-feet; Cottages homes and Terrace homes – Front, Side and Interior Rear will have zero foot (0') lot lines; Minimum of 10-feet of building separation.  
Independent Living, Assisted Living and Memory Care- Front: 40-feet; Side: 20-feet; 25-foot interior rear and 50-foot exterior rear.
- Water and Sewer: Provided by the City of Gainesville. When all phases are complete, water will be looped from Ahaluna Drive to Strickland Drive. Sewer will require several pump stations with gravity to Dawsonville Highway which has ample capacity.
- Streets: All interior streets and driveways are proposed to be publically owned and maintained. 50-foot right-of-way widths; 24-foot pavement widths; 4-foot wide sidewalks on at least one side of each residential road. It is intended that the side streets serving the cottages, terrace homes and the Independent / Assisted Living will be private.
- Parking: Each single-family detached home and terrace home will have a 2 car garage; Cottage homes will have surface parking for two vehicles.
- Garbage Pickup: Provided by the City of Gainesville.

#### Commercial

- Maximum building coverage: 70% of lot
- Maximum building height: 75-feet
- Minimum landscaped open space: 10%
- Minimum front landscape strip: 10-feet; Side and rear landscape strip: 6-feet
- Setbacks: Front: 40-feet from the right-of-way; Side: 10-feet; Interior rear: 25-feet; Adjacent to residential use: 50-feet
- Minimum Parking: City of Gainesville standards for use.
- Building Materials: Building exteriors not screened from view of a public right-of-way or any property line shall have an architectural treatment of brick, brick/frame, stone, stucco, or another architectural treatment approved by the Community Development Director.

#### ▪ **Adjacent Land Use and Zoning**

The subject property is positioned near the northwestern edge of the city limits between Dawsonville Highway (S.R. 53) and Lake Sidney Lanier. The property fronting Dawsonville Highway (SR 53) is located within the Gateway Corridor Overlay Zone. Single-family homes and undeveloped land surround the subject property to its north, south and east, some of which are located off of Ahaluna Drive, Watauga Drive, Sportsman Club Road, Strickland Drive, Karen Lane and within the Lakeshore Heights Subdivision. These properties are zoned Residential-I (R-I) within the City of Gainesville and Agricultural Residential-III (AR-III), Residential-I (R-I) and Vacation Cottage (V-C) within Hall County. There are also single-family homes to the west located off Skyview Place in the City zoned Residential-I (R-I) as well as Skyview Lane and Skyview Drive zoned Agricultural Residential-III (AR-III) in the County.

Commercial properties can be found to the north, south and west located along Dawsonville Highway. These properties include various retail stores, restaurants, convenience store/gas station, mini warehouses, boat sales, boat dock manufacturing and multi-family apartments. These properties are zoned Highway Business (H-B) within Hall County and General Business (G-B), Regional Business (R-B), Residential-II (R-II) and Planned Unit Development (P-U-D) within Gainesville. Recent significant development includes the Northlake Square shopping center and several outparcel developments located to the south zoned General Business (G-B) within the City of Gainesville.



## ▪ **Traffic Impact Study Summary**

A Traffic Impact Study was completed for the proposed development on January 24, 2017 and later revised on April 7, 2017 by Marc R. Acampora, PE, LLC Traffic Engineering. Most of the traffic counts were collected on Thursday, November 17, 2016 from 7:00 A.M to 9:00 A.M. and from 4:30 P.M. to 6:30 P.M. The counts at the North Lake Square entrance were collected on Wednesday, March 22, 2017. The magnitude of the side street volumes were found to be very comparable with the counts performed for this current study, and generally slightly higher. However, the volumes on the major streets were consistently notably higher for this current study. Historic Georgia DOT 24-hour traffic counts were also collected in the vicinity from the year 2015. The annual daily traffic volume on SR 53 north of Sportsman Club Road was 25,600 vehicles per day. The entire project is expected to generate 189 new trips in the a.m. peak hour, 274 new trips in the p.m. peak hour, and 3,387 new trips during a 24-hour weekday. The study extended one mile from the limits of the proposed site and included the following nine intersections:

1. Sportsman Club Road at Strickland Drive
2. Dawsonville Highway at Sportsman Club Road
3. Dawsonville Highway at Avonlea Way
4. Dawsonville Highway at Canterbury Road
5. Dawsonville Highway at Ahaluna Drive
6. Dawsonville Highway at North Lake Square Shopping Center Entrance
7. Dawsonville Highway at Beechwood Boulevard
8. Dawsonville Highway at McEver Road
9. Dawsonville Highway at Green Hill Circle
10. Dawsonville Highway at Shallowford Road

A summary of the study revealed that future operations, upon the project being fully constructed and operational, at the below intersections would have extremely heavy traffic flows rated LOS F. LOS "F" is a condition of extremely heavy flow, with frequent stoppage and very slow speeds. Traffic is unstable and often comes to a complete halt. These intersections include:

1) A.M. and P.M. peak hour southbound approach at Dawsonville Highway at Sportsman Club Road; 2) A.M. and P.M. peak hour eastbound and westbound left turn at Dawsonville Highway and Avonlea Way; 3) A.M. and P.M. peak hour eastbound and westbound left turn at Dawsonville Highway and Canterbury Road; 4) A.M. and P.M. peak hour westbound approach at Dawsonville Highway and Ahaluna Drive; 5) A.M. and P.M. peak hour eastbound left turn at Dawsonville Highway and Beechwood Boulevard; 6) P.M. peak hour northbound Dawsonville Highway at McEver Road; 7) A.M. / P.M. peak hour eastbound approach at Dawsonville Highway and McEver Road; 8) P.M. peak hour westbound approach at Dawsonville Highway at Green Hill Circle; and 9) P.M. peak hour eastbound approach at Dawsonville Highway and Shallowford Road.

The summary of findings and recommendations of the study are as follows:

### **Sportsman Club Road at Strickland Drive**

No changes are recommended at this intersection for the existing, no-build, or Future Phase One and Future Phase Two conditions.

### **Dawsonville Highway at Sportsman Club Road**

The side street delays at this intersection are significant now and will increase in the future. 1) While a warrant analysis was not performed as part of this traffic impact study, the low side street volumes make the intersection an unlikely candidate for signalization. The potential for justifying

signalization will increase in the future, but side street volumes will continue to remain moderate. 2) This study also identifies the need for a northbound exclusive right turn lane to be added on GA 53 at Sportsman Club Road. Northbound and southbound exclusive left turn lanes are currently provided at this median break.

#### **Dawsonville Highway at Avonlea Way**

Side street delays are high at the existing eastbound approach of Avonlea Way, and these delays will increase in the no-build and future conditions. The side street volumes are predominately right turners, with extremely low left turn volumes. 1) The Lanier Tract will introduce a new fourth leg at the Avonlea Way intersection (there is an existing private residential driveway at this median break, which would be replaced by the Lanier Tract access). Northbound and southbound exclusive left turn lanes are currently provided at this median break. The volumes exiting the new Lanier Tract access will be low and many of them will be right turners. Therefore, this intersection is considered unlikely to be a candidate for signalization in the existing, no-build, and Future Phases One and Two, even with the addition of the Lanier Tract trips. 2) The Georgia DOT right turn lane analysis suggests that a northbound exclusive right turn lane should be considered at this access and the site plan includes the addition of this lane. 3) The new site access should be constructed with one entering lane and one exiting lane. 4) The side street approach exiting the site should be controlled by side street stop sign and accompanying stop bar.

#### **Dawsonville Highway at Canterbury Road**

Side street delays are high on the existing eastbound approach of Canterbury Road and these delays will increase in the no-build and future conditions. As with Avonlea Way, the side street volumes at this intersection are predominately right turners, with extremely low left turn volumes. For this reason, this intersection is considered an unlikely candidate for signalization in the existing, no-build, and Future Phase One conditions. The outparcel access will align with Canterbury Road and the Lanier Tract will connect through the outparcels to GA 53 at this location. Northbound and southbound exclusive left turn lanes are currently provided at this median break. A short southbound deceleration lane is provided on GA 53 at Canterbury Road, though this lane does not appear to have been constructed to current Georgia DOT design standards. The northbound right turn volume will be low in the Future Phase One condition, and the Georgia DOT right turn lane analysis indicates that no decel lane will be required for Future Phase One. 1) However, with the future development of the retail outparcels, by others, the right turn volumes will be significant, primarily due to the outparcels, and a northbound deceleration lane is recommended for this location. The Future Phase Two side street volumes exiting the outparcels will be notable and this intersection will likely be a prime candidate for signalization upon development of the outparcels. 2) It is recommended that at such time as the outparcels are planned to be developed, a signal warrant study be performed for this intersection according to the standards set forth in the Federal Highway Administration's *Manual On Uniform Traffic Control Devices* (MUTCD). 3) This new access at the Canterbury Road median break should be constructed with at least one entering lane and an exiting shared left/through lane and an exclusive right turn lane. The two westbound lanes are in anticipation of the development of the outparcels. With only the Lanier Tract volumes, only one entering and one exiting lane would be required. 4) Until signalization is warranted, the side street approach exiting the outparcel tracts should be controlled by side street stop sign and accompanying stop bar.

#### **Dawsonville Highway at Ahaluna Drive**

1) The review of Georgia DOT auxiliary lane standards indicates that a northbound right turn lane should be added on GA 53 at Ahaluna Drive in the existing condition. 2) The future volumes exiting Ahaluna Drive would benefit from the addition of a second westbound lane, resulting in a shared left/through lane and an exclusive right turn lane on Ahaluna Drive at GA 53. This second lane would reduce the demand for side street green time on the signal and improve side street

levels of service. It was noted that the need for relocation of the signal steel strain pole, a drainage structure, and possibly a large brick monument sign, may reduce the feasibility of adding this second westbound lane. 3) With the addition of Lanier Tract DRI southbound left turns, consideration should be given to adding a protected / permissive southbound left turn phase, which would match the existing protected / permissive phasing for the northbound left turn. The Georgia DOT left turn phase warrants are not satisfied for this southbound left turn based on volume projections alone. However, other factors such as high speeds on GA 53 and the senior residents expected to reside at the Lanier DRI, merit consideration. 4) Field observations suggest that there may be an opportunity to shorten the cycle length, which would reduce time spent by vehicles waiting on the side street.

#### **Dawsonville Highway at North Lake Square Access**

This intersection operates acceptably in all analysis conditions. The side street approaches do incur some delays at all times, primarily due to the long cycle length on the signal, which allocates most of the green time, appropriately, to GA 53. The side street delays are incurred by minimal volumes in the a.m., since the retail served by the side streets are generally not operational at that time. Higher volumes incur the side street delays in the p.m., when the retail is operational. However, overall this intersection operates appropriately and no mitigation is recommended for any analysis condition.

#### **Dawsonville Highway at Beechwood Boulevard**

At the GA 53 / Beechwood Boulevard intersection, it is noted that a fourth leg is currently stubbed-out across from Beechwood Boulevard and a retail development is under construction on that site. Auxiliary left and right turn lanes are provided on GA 53 serving Beechwood Boulevard and the future fourth leg appears to be designed for right-in / right-out access only, with a northbound deceleration lane provided on GA 53. No other changes are recommended at this intersection based on this study.

#### **Dawsonville Highway at McEver Road**

The lane configuration and signal phasing at this intersection are generally appropriate. 1) The existing southbound right turn volume is sufficiently-high (828 a.m., 481 p.m.) to merit consideration of the addition of a second exclusive right turn lane and/or the addition of a protected right turn overlap phase. The justification for adding this phasing and/or second right turn lane will increase as volumes increase. 2) Finally, there may be an opportunity to reduce the cycle length and fine-tune the signal timing at this intersection.

#### **Dawsonville Highway at Green Hill Circle**

This signalized intersection incurs high side street delays, again, due to the allocation of the majority of green time to the Dawsonville Highway approaches. 1) There may be an opportunity to reduce the cycle length and fine-tune the signal timing at this intersection.

#### **Dawsonville Highway at Shallowford Road**

The lane configuration and signal phasing are appropriate for this intersection. 1) Reduction of the cycle and optimization of the allocation of green time could reduce delays and queuing at this intersection.

#### **▪ Other Departmental Comments**

According to the Georgia Department of Transportation, the applicant will need to coordinate with GDOT since this develop will impact the State Route System.

The Gainesville Public Works Department has recommended additional transportation improvements which are stated within the traffic zoning conditions listed below.

The Gainesville Department of Water Resources states that the City currently has adequate water and sanitary capacity for the proposed development. The developer will be required to construct extensions for both water and sanitary sewer to connect the existing City facilities, along with pump stations required for areas of the development unable to utilize gravity sanitary sewer for conveyance.

The Gainesville Police Department's primary concern will be the increased traffic accidents from the additional cars on the Dawsonville Highway corridor.

A Development of Regional Impact Study (DRI #2638) was submitted for this development. Upon review of the proposal, the Georgia Mountains Regional Commission states that the proposal does not present any potential adverse inter-jurisdictional impacts, assuming the project will be in compliance with State and local regulations and the Gainesville-Hall Metropolitan Planning Organization.

▪ **Zoning History**

*The following zoning actions have taken place in the immediate area during the last ten years:*

**2015** – A request by West Ahaluna, LLC to annex a 8.74± acres tract with a zoning of Residential-I-A (R-I-A) located at 0 and 1264 Ahaluna Drive was conditionally approved for no proposed use.

**2014** – A request by West Ahaluna, LLC to annex a 70.23± acres tract with a zoning of Planned Unit Development (P-U-D) located at 0 and 1817 Ahaluna Drive; 1982 Dawsonville Highway; 2208 Karen Lane; 2008, 2016 and 2029 Strickland Drive was approved with conditions. In addition, the same applicant requested to rezone a 31.93± acres tract located at 0 Ahaluna Drive NW and 1489 West Lake Drive NW from Residential-I (R-I) to Planned Unit Development (P-U-D) was also approved with conditions for a 199-lot single-family subdivision.

**2013** – A request by America's Home Place, Inc. to rezone a 25.11± acres tract located at 0 and 1198 Dawsonville Highway; 1232 Ahaluna Drive and 1162 Lakeshore Circle from Residential-I (R-I), Residential-II (R-II) and Office and Institutional (O-I) to General Business (G-B) zoning for a commercial shopping center was approved with conditions.

**2012** – A request by America's Home Place, Inc. to rezone a 4.711± acres tract located at 0, 1122, 1138, 1162 and 1198 Dawsonville Highway from Residential-II (R-II), Office and Institutional (O-I) and General Business (G-B) to General Business (G-B) zoning for retail, restaurant and vehicle service uses was approved with conditions.

**2011** – A request by Kauffman Tire Inc. for a special use within Regional Business (R-B) zoning on a 1.19± acres tract located at 801 & 805 Dawsonville Highway was approved with conditions for an automotive tire and service store.

**2010** – A request by Bill Dupree to annex a 7.11± acres tract with General Business (G-B) zoning and rezone a 2.44± acres tract from Residential-II (R-II) to General Business (G-B) located at 0, 1293, 1297 and 1139 Dawsonville Highway was approved with conditions for a business center with retail, office and restaurant uses.

▪ **Staff Analysis**

**(1) Is the proposed use suitable in view of the zoning and development of adjacent and nearby property?**

The proposed mixed-use development is suitable based on the surrounding uses. The subject property is located adjacent to both residential and commercial uses with zonings of Agricultural Residential-III (AR-III), Residential-I (R-I), Vacation Cottage (V-C), Planned Unit Development (P-U-D), Highway Business (H-B), General Business (G-B) and Regional Business (R-B). Much of the development within the immediate area has included significant commercial growth with some limited new housing.

**(2) Will the proposed use adversely affect the existing use or usability of adjacent or nearby property?**

The subject property is currently zoned and approved for residential and commercial purposes. The proposed development is master planned and proposes more residential housing.

Given the size of the property, it is expected the proposed mixed-use development will have impacts to traffic movements along Dawsonville Highway which are currently strained during the holiday period and certain peak times. As the proposed development becomes built out over time, additional traffic will slow turning movements at some nearby Dawsonville Highway intersections. Transportation improvements as identified within the traffic study and zoning conditions will be necessary to help reduce negative impacts to Dawsonville Highway and nearby intersections. Of note, with the proposed residents being mostly age restricted, the traffic created is typically less than if proposed as a traditional subdivision.

In addition, due to the proposed developments proximity to Lake Lanier, environmental impacts should be properly mitigated through improved storm water measures. Sedimentation ponds and bioretention areas will be required within the development to help protect the lake. In addition, the Corps of Engineers will require the applicant to install rip rap to protect the shoreline near the proposed two community boat docks due to the additional boat traffic.

**(3) Is the proposed use compatible with the purpose and intent of the Comprehensive Plan?**

The Gainesville Future Development Map places the subject property within the *Low-Medium Density Residential* land use category and the *Mixed Use General* land use category. The *Low-Medium Density Residential* land use category includes areas containing or planned for single-family detached or semi-detached housing at densities up to 4.0 dwelling units per acre. The proposal has a density of 4.27 dwelling units per acre for the 185.02± acres portion of property to be zoned Planned Unit Development (P-U-D). The *Mixed Use General* land use category includes areas containing or planned for a mixture of land uses including office, neighborhood retail, and residential.

The subject property is also located within the *Suburban Residential* and *Suburban Commercial* Character Areas. The goal of this character area is to preserve older, stable residential subdivisions and encourage newer projects with smaller lot sizes, pedestrian infrastructure, and buildings patterned after traditional local housing, possibly containing a small neighborhood-serving "village center". Mixed-use neighborhood design is desired but not required. In areas where natural features or sensitive environments are important, cluster housing or conservation subdivision design may be appropriate. Community access points and shoreline restoration are encouraged as part of future development on greenfield parcels between Dawsonville Highway

and Lake Lanier. Land uses allowed within the *Suburban Residential* area include low-density residential, medium density residential, multi-family residential, public / institutional, commercial, and parks / recreation / conservation and mixed use.

The *Suburban Commercial* area will continue to grow as a regional retail center for the City and Hall County, but should diversify over time to include multi-family housing and a higher-density mix of retail, office, services and high-quality employment. In addition, expanding premium retail could offer a variety of shopping options that are currently not available elsewhere in the City. As it grows, the area will become one of the most prominent commercial corridors and gateways into the City, and a thriving economic anchor for the northwest side. When development occurs, adequate buffers should be maintained around development to protect watersheds and sensitive environments. Land uses allowed within the *Suburban Commercial* area include commercial, public / institutional, multi-family residential and mixed use.

**(4) Are there substantial reasons why the property cannot or should not be used as currently zoned?**

The subject property is currently zoned for single-family and commercial purposes and could be developed as such. It is estimated that a total of 341 residential homes could be constructed within the entire development based on the existing zoning in the City and County. However, water and sewer services are necessary in order to develop the subject property for the desired use and density. Due the amount of undeveloped land and green space, the subject property should be carefully planned as opposed to developed piecemeal. Master planned communities typically provide for better uniformity and higher development standards such as building quality, connectivity, common space, landscaping, environmental protection and services that would otherwise not be provided to the residents.

**(5) Will the proposed use cause an excessive or burdensome use of public facilities or services, including but not limited to streets, schools, water or sewer utilities, and police or fire protection?**

The subject property and surrounding development currently utilizes City water and sewer services and there is sufficient capacity to serve the development. Water and sewer extension to the development will be required.

As listed in the above summarized Traffic Impact Study for this project, the entire project will generate 189 new trips in the a.m. peak hour, 274 new trips in the p.m. peak hour, and 3,387 new trips during a 24-hour weekday. The improvements as identified within the study and the proposed zoning conditions are strongly recommended by staff to help mitigate some of the traffic concerns.

Existing public safety services respond to the adjacent and nearby properties. Gainesville Fire Station #1 is located approximately 3.2 miles away from the furthest proposed residential lot. As well, Hall County Fire Station #13 off of Sardis Road is also located approximately 3.4 miles away. Gainesville and Hall County currently have an “automatic aid” agreement for emergency services that was first established in 1997. The agreement allows the agency that is closest to an incident to respond despite municipal boundaries. Regardless, the amount of proposed single-family homes will put additional strain on fire services due to the subject properties proximity to the existing city limits which could impact the City’s ISO rating. However, a 3.0 acres tract of land is planned for a future City fire station which would front Dawsonville Highway.

According to the Gainesville Police Department, increased traffic accidents from the additional cars on the Dawsonville Highway corridor are a primary concern.

No impacts to the school system are expected as the development is an age restricted community. Of note, a portion of the subject property was previously approved for 199 homes which were not age restricted. No comments or concerns were received by the school system regarding this request.

**(6) Is the proposed use supported by new or changing conditions not anticipated by the Comprehensive Plan or reflected in the existing zoning on the property or surrounding properties?**

It is staff's opinion that proposed mixed-use is consistent with the Gainesville Comprehensive Plan but the number of units should be reduced to be within density range. The property is located within a residential area between Dawsonville Highway and Lake Lanier, and is near Gainesville's most active regional commercial corridors. Existing uses along Dawsonville Highway south of the bridge consists of mostly commercial in nature excluding a few large apartment complex developments (Park Creek, Carrington Park and Lake Lanier Club), and some isolated single-family homes within Hall County. Numerous properties fronting this segment of Dawsonville Highway have been developed for non-residential purposes over the past 15 to 20 years. Some examples of this include the Northlake Square shopping center, Carrington Park retail center, Village Shoppes of Gainesville, Home Depot, Best Buy, McEver Corners shopping center, Texas Roadhouse, Olive Garden, Cheddar's, Buffalo Wild Wings and a child day care facility. A 94-room Holiday Inn Express is currently under construction behind the Cheddars restaurant.

The proposed mixed-use development appears to be of high quality and would serve as an appropriate transitional use for the area between Dawsonville Highway and the residential uses adjacent to Lake Lanier. As well, the proposal will provide for additional shopping opportunities and a mixture of housing needed within Gainesville that will further help sustain the Dawsonville Highway corridor.

**(7) Does the proposed use reflect a reasonable balance between the promotion of the public health, safety, morality, or general welfare and the right to unrestricted use of property?**

Due to the subject property's proximity to existing residential and commercial land uses, the proposed mixed-use development, with the recommended conditions of zoning appears to promote a reasonable balance between the interests of the City, the property owner, and neighboring residents and property owners.

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▪ **Staff Recommendation**

The Planning Division staff is recommending **conditional approval** of the proposed annexation and rezoning request based on the Comprehensive Plan and the adjacent residential and non-residential land uses.

## **Conditions**

### **Development Standards**

1. The development standards within the applicant's narrative, concept plan and architectural renderings shall be made part of the zoning ordinance, and shall be subject to the Community Development Director approval. Any zoning conditions adopted as part of this zoning ordinance that conflict with the applicant's narrative, concept plan and architectural renderings shall take precedence over the applicant's development standards.
2. Prohibited commercial uses shall include motels or hotels with rooms accessed from the exterior of the building, adult novelty stores, adult entertainment centers, pawn shops, gas stations, tire stores, massage parlors except for practitioners licensed by the State of Georgia, vaping stores, auto body shops, automobile sale establishments, marine sales or repair stores, automated or non-automated car wash, coin-laundry facilities, truck stop, tattoo parlors, psychics, fortune tellers, clairvoyants and the like.
3. The applicant's revised concept plan and narrative proposes a total of 790 senior residential units. The total number of residential units approved for the development shall not exceed 770 senior residential units. The reduction of 20 residential units may occur anywhere within the development. However, a minimum of 10 residential units shall include single-family homes, cottages and terrace homes with frontage along Ahaluna Drive and adjacent to existing single-family properties located off of Karen Lane, Watauga Drive and West Lake Drive.
4. The development shall comply with applicable U. S. Department of Housing and Urban Development (HUD) rules for age-restricted communities. The organization established for the management of the development shall comply with HUD rules for verification of occupancy and shall maintain procedures for routinely determining the occupancy of each unit. Such procedures may be part of a normal leasing or purchasing agreement and must provide for regular updates as required by HUD.
5. All proposed single-family detached homes shall have a minimum front yard setback of 20-feet as measured from the right-of-way line and shall have a minimum distance of 10-feet between houses. Additionally, all cottages with frontage along Ahaluna Drive shall have a minimum front yard setback of 20-feet as measured from the right-of-way line and shall have a minimum distance of 10-feet between houses. The lots that back up to existing residences located off of Karen Lane, Watauga Drive and West Lake Drive shall have minimum 20-feet rear setbacks.
6. The following buffer standards shall be required:
  - a. A minimum 20-foot wide buffer shall be required for all proposed single-family detached homes, cottages and terrace homes where adjacent to existing single-family homes.





year of the effective date of this zoning ordinance for the future construction of a City of Gainesville fire station. All costs associated with deeding the property shall be at the full expense of the developer. Architectural design for the fire station must be approved by both the City of Gainesville and the developer, and shall be substantially similar with residential and commercial standards submitted with the application.

13. No more than 10% of the units within the proposed indoor storage facility may be leased to non-residents of the proposed development.

#### **Transportation / Traffic**

14. Prior to the issuance of a land disturbance permit, the developer shall provide a signal warrant analysis be performed per Georgia Department of Transportation (GDOT) standards for each of the following two intersections:

- a. Dawsonville Highway (SR 53) at Avonlea Way and the new access road; and
- b. Dawsonville Highway (SR 53) at Canterbury Road and the new access road. The design of the signal warrant analysis should account for the probability that GDOT will not approve a signal at this location and should evaluate the intersection for an R-CUT design at the median break. If a traffic signal is approved by GDOT, improvements for a traffic signal at the intersection will require approval of the Gainesville Public Works Director and GDOT Traffic Operations Office.

All costs associated with the signal warrant analysis study, and if warranted by such study, any costs associated with the installation of a traffic signal and intersection improvements shall be at the full expense of the developer.

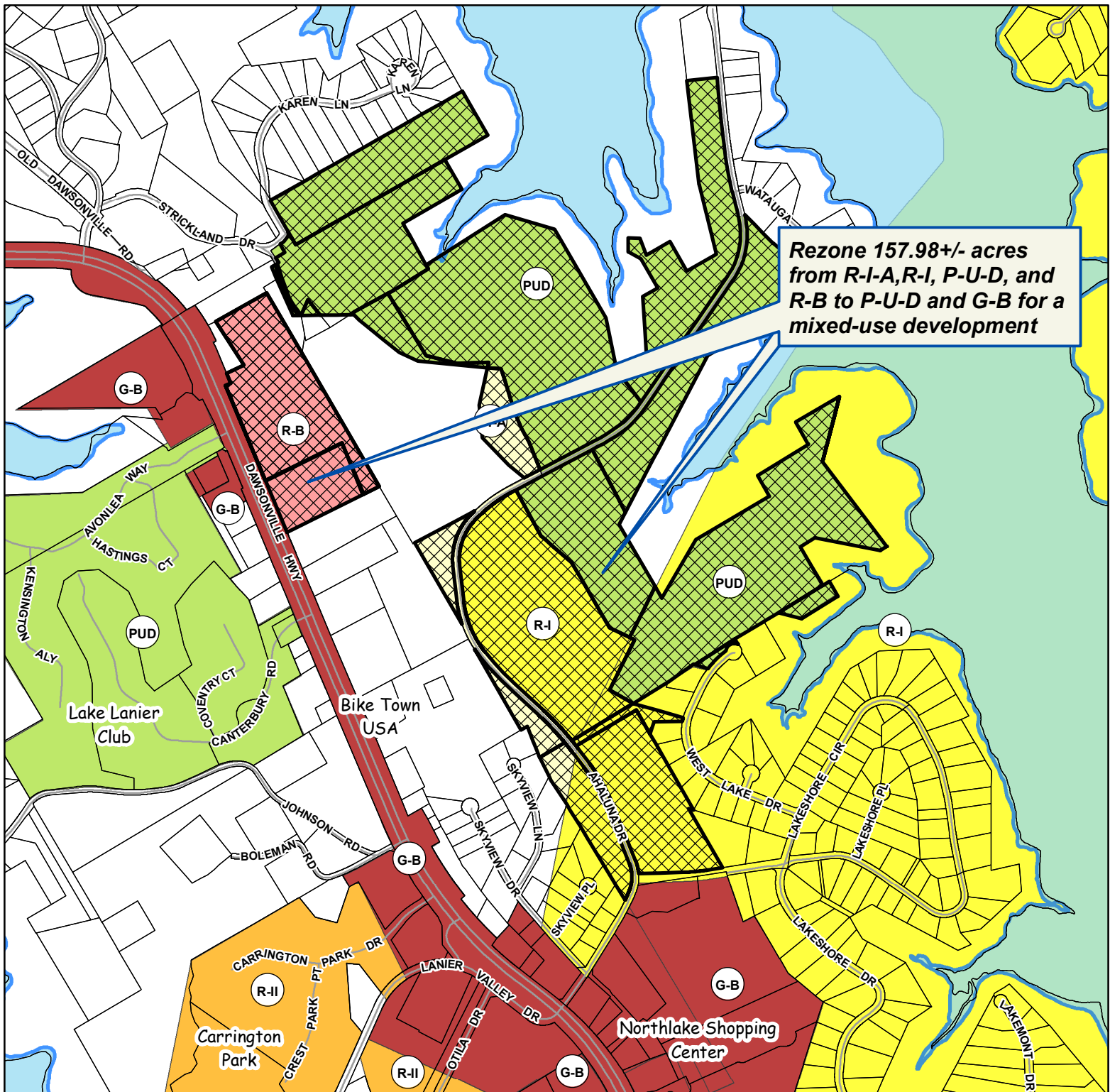
15. The developer shall perform the following traffic improvements identified within the Summary of Study Findings and Recommendations as stated within the revised Traffic Impact Study, dated April 7, 2017, for the proposed development:

- a. Dawsonville Highway (SR 53) at Avonlea Way and the new access road to include a northbound exclusive right turn lane to be added on Dawsonville Highway (SR 53) turning into new site driveway and the inclusion of one entering lane and one exiting lane for the new site access to be controlled by side street stop sign and accompanying stop bar; and
- b. Dawsonville Highway (SR 53) at Canterbury Road and the new access road to include a northbound exclusive right turn lane to be added on Dawsonville Highway (SR 53) turning into new site driveway and the inclusion of one entering lane and one exiting lane for the new site access to be controlled by side street stop sign and accompanying stop bar.

The developer shall coordinate these improvements with GDOT and the Gainesville Public Works Director prior to permitting. The Gainesville Public Works Director and GDOT shall have the final determination of the time line of these improvements based on the developer's proposed construction schedule. All costs associated with the improvements shall be at the full expense of the developer.

16. Prior to the issuance of a land disturbance permit for the Planned Unit Development (P-U-D), the developer shall evaluate, design and construct the left turn lanes on Dawsonville Highway (SR 53) to meet GDOT storage and design requirements at Avonlea Way and the new site driveway at Canterbury Road. Prior to the issuance of a land disturbance permit for the commercial development zoned General Business (G-B), the developer shall evaluate, design and construct the left turn lanes on Dawsonville Highway (SR 53) to meet GDOT storage and design requirements. If the existing left turn lane at this location meets these requirements, this condition will be deemed satisfied.
17. Developer consents to pay \$425,000.00 to be used solely for the purpose of making roadway improvements along Dawsonville Highway (SR 53) from McEver Road (SR 53) to Ahaluna Drive. In this regard, the developer shall deposit \$100,000.00 upon issuance of the initial land disturbance permit for the Planned Unit Development (P-U-D), and annually thereafter an additional \$100,000.00 until the full \$425,000.00 is paid in full (provided, the fourth and final payment will be for \$125,000.00). All such payments will be deposited into an escrow account at a financial institution chosen by the City of Gainesville. The City of Gainesville shall choose an escrow agent, who shall be authorized to disburse the funds to the City of Gainesville as said funds are needed to make roadway improvements along Dawsonville Highway (SR 53) from McEver Road (SR 53) to Ahaluna Drive. The amount as stated above is based on the cost estimate previously provided by the City of Gainesville to the developer for roadway improvements in addition to those improvements referenced elsewhere in the zoning conditions affecting the property that is the subject of the zoning application.
18. Prior to the issuance of a land disturbance permit, the intersection of Strickland Drive, Karen Lane and the new access road to the proposed development shall be redesigned to include realignment similar to what is shown on the revised concept plan for better traffic circulation, and to meet current roadway design criteria. The improvements shall be completed prior to permitting direct access from the development onto Karen Lane and Strickland Drive and prior to the construction of the most northern Pod of terrace and cottage homes. All costs associated with the improvements shall be at the full expense of the developer.
19. Prior to the issuance of a land disturbance permit, the developer shall seek verification from Hall County to determine whether or not any improvements will be required to the intersection of Sportsman Club Road and Strickland Drive.
20. All new streets shall meet the standards within the current Gainesville Unified Land Development Code. These same standards shall be required for the segment of Ahaluna Drive starting at the north side of the existing power line easement and adjacent to the entrance of the terrace homes, and shall extend in a northeasterly direction south of Watauga Drive where the city limits terminate. The remaining portions of Ahaluna Drive within the city limits shall meet the City of Gainesville Standards excluding the requirements of curb and gutter. All other residential uses, amenities, office and commercial areas shall provide for pedestrian connectivity throughout the development. All costs associated with the improvements shall be at the full expense of the developer.

21. Prior to the issuance of a land disturbance permit, the developer shall seek approval from the City of Gainesville and the Corps of Engineers to improve the existing Ahaluna Drive cul-de-sac to provide for better turn around for emergency and utility vehicles. If approved, curb and gutter and sidewalks shall be extended to the Ahaluna Drive cul-de-sac. All road and traffic improvements to Ahaluna Drive shall be at the expense of the developer and shall meet the standards within the current Gainesville Unified Land Development Code prior to acceptance. All cul-de-sacs constructed or modified as part of the development will be positioned (subject to Corps of Engineers, and City of Gainesville approval, as needed) on the west side of the road, in approximately the current location of the existing cul-de-sac but positioned in a way that would minimize the impact to the lots on the east side of the road. The final design shall require approval from the City of Gainesville.
22. There shall be no driveways from individual homes allowed onto Ahaluna Drive for lots that have road frontage on any new proposed interior street. There shall be no driveways from individual homes allowed onto Karen Lane or Strickland Drive.
23. There shall be no access allowed onto West Lake Drive and Skyview Drive.
24. The proposed commercial, retail and office outparcels shall provide inter parcel connectivity to one another.



Applicant:

## REZONING REQUEST

OAK HALL COMPANIES, LLC



### Request:

Rezone 157.98+/- acres from R-I-A, R-I, P-U-D, and R-B to P-U-D and G-B for a mixed-use development

Subject Area Address: 0, 1264 and 1817 Ahaluna Drive; 1876 Dawsonville Hwy; 2208 Karen Ln; 0 and 2029 Strickland Drive; 0 and 1489 West Lake Dr.

Meeting: 5/9/2017

Prepared: 2/16/2017

Gainesville Community Development Department

 Subject Property

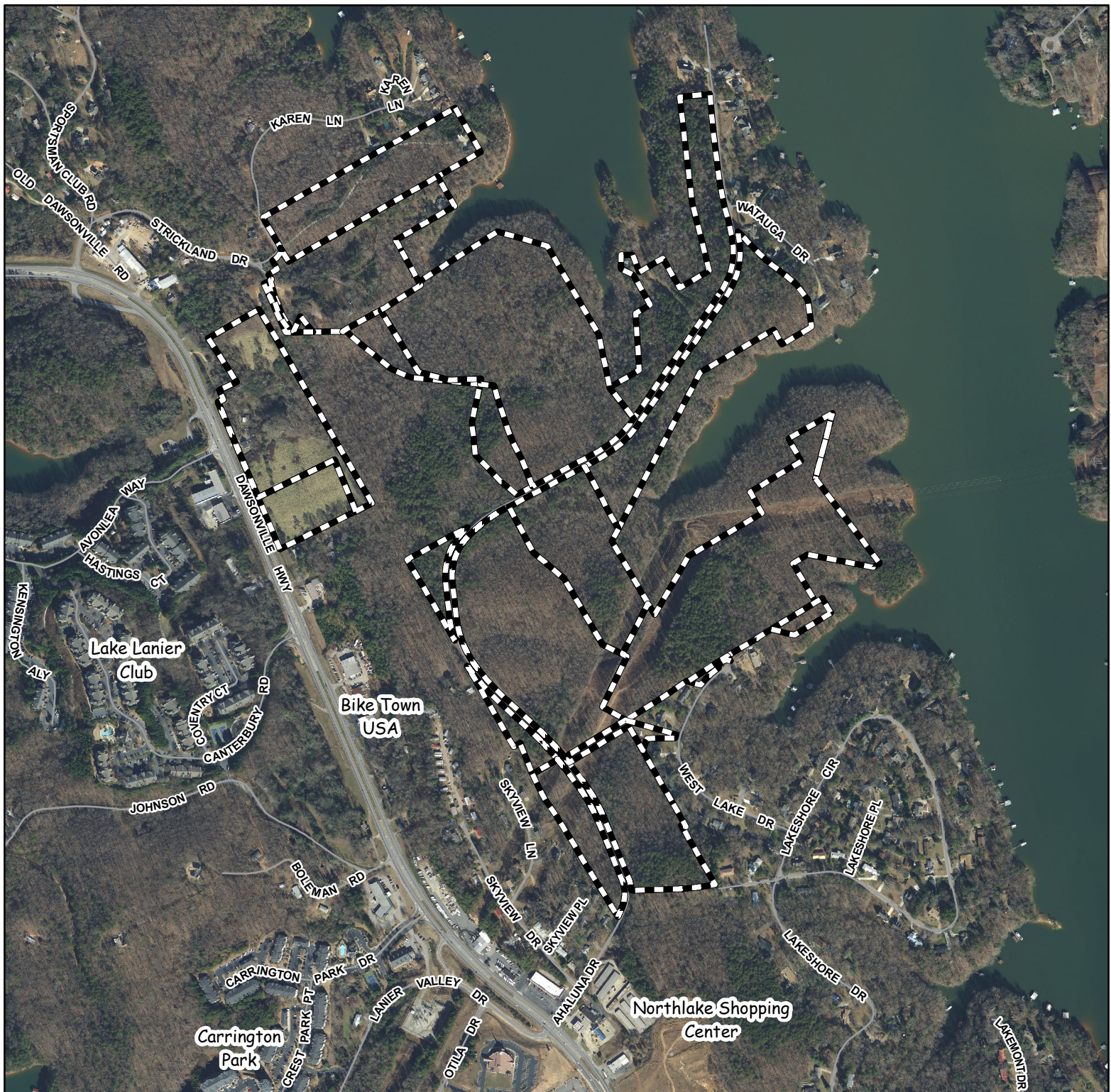


0 480 960 1,440 1,920 Feet

1" = 800'

Tax Parcel: 00-109B-000-003A; 00-110-000-001, 006, 030 031, 034, 035, 036, 037 and 038; 01-110-001-006; 01-110A-004-022; 01-114-001-001, 026, 1489 and 1490





Applicant:

## REZONING REQUEST

OAK HALL COMPANIES, LLC



### Request:

Rezone 157.98+/- acres from R-I-A, R-I, P-U-D, and R-B to P-U-D and G-B for a mixed-use development

Subject Area Address: 0, 1264 and 1817 Ahaluna Drive; 1876 Dawsonville Hwy; 2208 Karen Ln; 0 and 2029 Strickland Drive; 0 and 1489 West Lake Dr.

Meeting: 5/9/2017

Prepared: 2/16/2017

Gainesville Community Development Department



Subject Property

Aerial from 2015

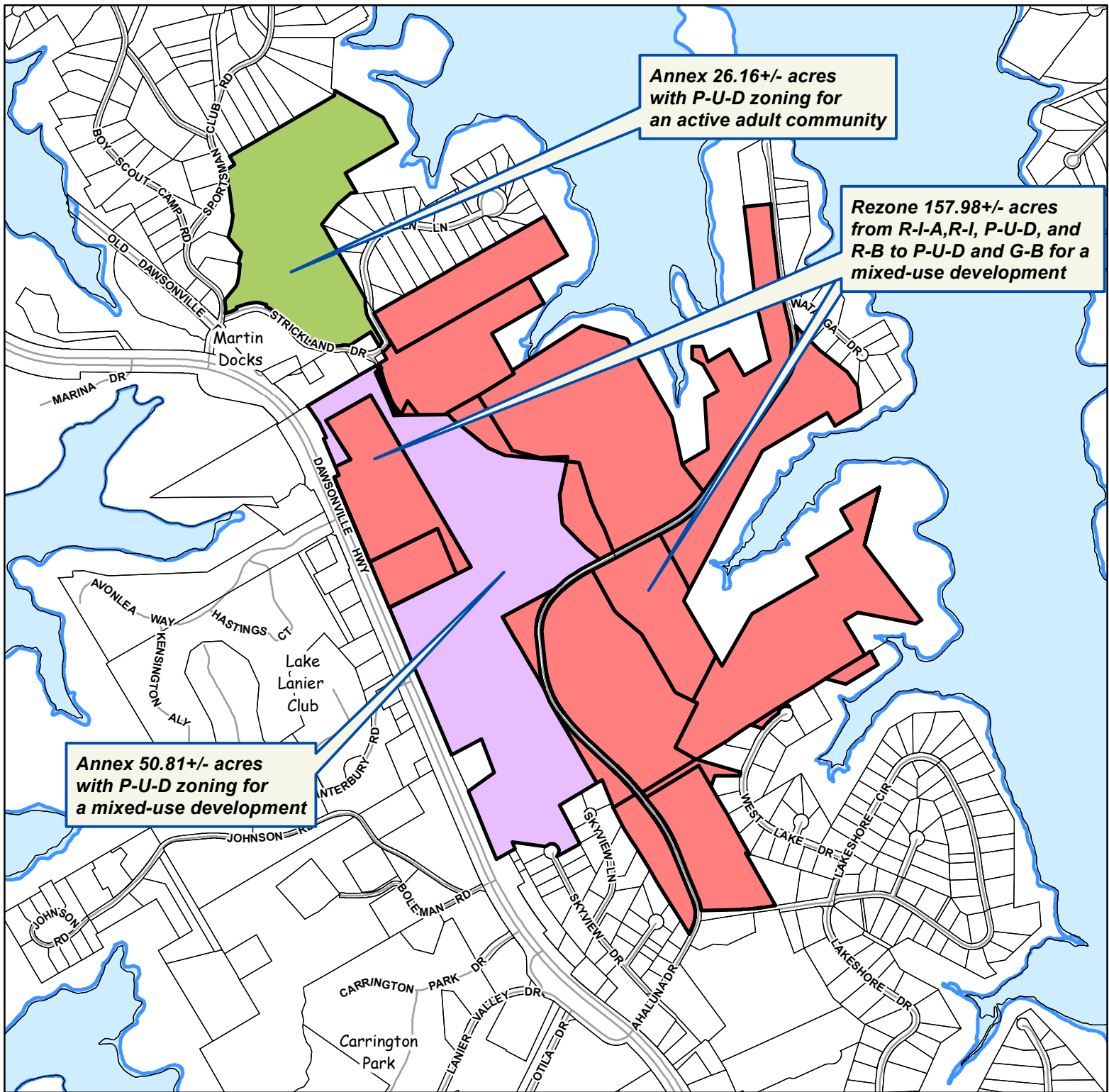
0 480 960 1,440 1,920 Feet



1" = 800'

Tax Parcel: 00-109B-000-003A; 00-110-000-001, 006, 030 031, 034, 035, 036, 037 and 038; 01-110-001-006; 01-110A-004-022; 01-114-001-001, 026, 1489 and 014





Applicant:

## ANNEXATION AND REZONING REQUEST

OAK HALL COMPANIES, LLC



### Request:

Rezoned 157.98+/- acres from R-I-A, R-I, P-U-D, and R-B to P-U-D and G-B and annex 76.97+/- acres with P-U-D zoning for a mixed-use development/active adult community

### Subject Area Address:

See attached list

Meeting: 5/9/2017

Prepared: 2/16/2017

## Gainesville Community Development Department

- Annex 26.16+/- Acres
- Annex 50.81+/- Acres
- Rezoned 157.98+/- Acres

0 540 1,080 1,620 2,160 Feet



1" = 900'

Tax Parcel: See attached list

J. Ethan Underwood  
[eunderwood@mhtlegal.com](mailto:eunderwood@mhtlegal.com)

REVISED 2017-04-24

**NARRATIVE REPORT, LAND USES AND DEVELOPMENT SUMMARY, IMPROVEMENT REQUIREMENTS  
COMPARISON, AND COMMUNITY BENEFIT STATEMENT FOR ZONING APPLICATION**

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Applicant:</b>        | <b>Oak Hall Companies, LLC</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Subject Property:</b> | <b>157.98 Acres Designated as Hall County Tax Parcel(s): See Attached</b>                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Current Zoning:</b>   | <b>PUD, R-I-A, R-B, &amp; R-I</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Proposed Zoning:</b>  | <b>PUD &amp; G-B</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Proposed Use:</b>     | <b>Mixed-Use development, consisting of:</b> <ul style="list-style-type: none"><li>▪ <b>790 age-restricted, independent living, assisted living, and memory care residences</b></li><li>▪ <b>Approximately 24,000 sf of restaurant, retail, office</b></li><li>▪ <b>Approximately 40,000 sf of storage</b></li><li>▪ <b>Approximately 10,650 sf public/semi-public use (Fire Station)</b></li><li>▪ <b>7 commercial outparcels with approximately 8,000 sf average per parcel of Office/Retail/Restaurant</b></li></ul> |
| <b>ROW Access:</b>       | <b>Dawsonville Hwy (SR53), Ahaluna Drive, &amp; Strickland Drive</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

This statement is intended to comply with the application procedures established by The City of Gainesville, GA for submittal of applications for annexation as required by the City of Gainesville Unified Land Development Code (the "ULDC"), City of Gainesville Public Hearing Application Requirements, and other City of Gainesville Ordinances and Standards and is intended to serve as the Narrative Report required by the ULDC. As part of this Narrative Report, the Applicant asserts the statements contained in the Application for Zoning Actions package, submitted herewith incorporated herein by reference, and as may be amended (the "Application"), describing justification for the requested zoning and for any request of variances, in any, as if such were fully stated herein.

The Applicant proposes to zone a total of 208.79 acres, consisting of the Subject Property's 157.98 acres, which currently located within the City of Gainesville, together with an adjoining 50.81 acre-Annexation Property located in unincorporated Hall County. The Applicant has submitted a concurrent annexation application for the unincorporated 50.81 acres, and incorporates all statements therein into this Application for Zoning Actions.

Approval of the annexation and the concurrent zoning application would yield 185.02 acres zoned PUD, and an additional 23.77 acres zoned G-B, all located within the City.



## **I. Land Uses and Development Summary**

The Applicant proposes to develop the Proposed Use on the Subject Property. The Subject Property is adjoined by residential dwellings along Lake Lanier to the north, east, southeast, west and southwest (zoned R-B, AR-III, PUD, V-C, R-II and R-I-A), and by commercially-zoned properties to the southwest, along SR53 (zoned H-B and G-B).

The Proposed Use is consistent with the intent of the Comprehensive Plan and the Future Development Map. The Subject Property is depicted on the Gainesville 2030 Comprehensive Plan, as Mixed-Use General and Low Density Residential (1 to 4 Dwelling Units per Acre). To accomplish this, the Applicant proposes to utilize the PUD and G-B zoning categories.

### **A. Zoning and Land Use**

#### **i. 3.76 acres to be zoned G-B (General Business District)**

If the zoning is approved as submitted, 3.76 acres of the Subject Property would be zoned G-B (General Business District), identified as Tract 3 on the Retracement for Oak Hall Companies, LLC, dated December 30, 2016, last revised March 31, 2017 (the “**Zoning Survey**”), submitted concurrently with this Application and incorporated by reference. This 3.76 acres of the Subject Property is sometimes hereafter referred to as the “G-B Zoning Tract.”

The G-B Zoning Tract would be governed by the general provisions of the UDLC for that zoning category. In this regard, the Applicant proposes to subject the G-B Zoning Tract to the land uses and performance standards depicted on the Zoning Plan, dated March 31, 2017, prepared for Oak Hall Companies, LLC by Site Development Consultants, Inc. (the “**Concept Plan**”), submitted concurrently with this Application and incorporated by reference.

#### **ii. 154.22 acres to be zoned PUD (Planned Unit Development)**

If the zoning application is approved as submitted, 154.22 acres of the Subject Property would be zoned PUD (Planned Unit Development), identified as Tract 1 & 2 on the Zoning Survey. This 154.22 acres of the Subject Property is sometimes hereafter referred to as the “PUD Zoning Tract.”

The Applicant proposes to subject the PUD Zoning Tract to the land uses and performance standards depicted on the Concept Plan. In addition, the Applicant also proposes to subject the PUD Annexation Property to the **PUD Performance Standards**, attached to and incorporated with this Narrative Report for Zoning.

### **B. Traffic Impact Analysis**

The Applicant also submits with this Narrative Report, and incorporates herein, a Trip Generation Report and Traffic Study Network Determination.

Permanent access to the development will be from the ROW Access. All of the development's interior streets and driveways will be publicly-owned and maintained.

Traffic generated from the development will be minimal and the entrance will be at a location where sight distance is sufficient. All curb cuts shall be coordinated and approved by the City of Gainesville and GDOT and acceleration and deceleration lanes will be installed as required. All streets within the development will be constructed to conform to standard requirements. Parking will be provided onsite as required by the ULDC.

#### **C. School System**

As the Annexation Property will be age-restricted use, impact on schools will be minimal.

#### **D. Utilities**

With regard to public utilities, water, sanitary sewer, electricity and cable are available to the site. The development's water and sewer needs will be served by the City of Gainesville. The Applicant will install underground utility lines within the development to serve the project on an as-needed basis.

#### **E. Economic Impact**

The Applicant submits and incorporates herein the attached **Economic Impact Statement**. The calculations therein (a) analyze the impact of the entire 208.79 acre Mixed-Use development and (b) assume the owners of the residential units will have no children and be exempt from School Property Taxes. The number of residents with children will be nominal, and any such persons would likely be required to pay School Property Taxes.

#### **F. Environmental Impact**

The project should also have a minimal impact on the environment. There should be no impact on air quality. Drainage, soil erosion, and sedimentation controls will be extensively utilized on the site after obtaining all required approvals from the Soil Conservation Service and the City of Gainesville. Best management practices will be utilized to protect natural resources. The Applicant will submit plans detailing the development for approval by all applicable and appropriate governmental agencies, based on conformity with subdivision and zoning requirements, as well as other applicable ordinances, statutes and regulations.

## II. Improvement Requirements Comparison

|                   | <u>City Standards</u>                                                                   | <u>Proposed Standards</u>                 |
|-------------------|-----------------------------------------------------------------------------------------|-------------------------------------------|
| ROW Widths        | 50 feet                                                                                 | 50 feet                                   |
| Pavement Widths   | 24 feet                                                                                 | 24 feet                                   |
| Sidewalk Width    | 4 feet                                                                                  | 4 feet                                    |
| Sidewalk Location | At least 1 side of each residential road, with connector sidewalks to commercial areas. | At least 1 side of each residential road. |

## III. Community Benefit Statement

The community will benefit from the Proposed Use, which will provide high quality housing for seniors, improved fire service, and commercial and recreational benefits to the community. The Proposed Use will have little impact on school attendance, as most age-restricted units will not house school-aged children. Residents of age-restricted housing also tend to drive less and, when they do, they drive during off-peak hours, thereby lessening the impact on community traffic.

The Proposed Use will provide quality architectural designs, and extend utility services to areas currently unserved by water and sewer. The Proposed Use will also improve road access on Ahaluna Drive.

## CONCLUSION

Approval of the Application will be in the best interest of the City. The Applicant respectfully requests that the Application, as requested by the Applicant, be approved. The Applicant also reserves the right to amend this statement and the Application by supplementing further responses and documents.

Sincerely,

*Ethan Underwood*

Ethan Underwood,  
 Attorney for the Applicant

# **PUD Performance Standards**

## **I. Residential Performance Standards**

### **RESIDENTIAL USE**

Maximum 790 Age-Restricted, Independent Living, Assisted Living, and Memory Care Dwellings on 185.02 acres zoned PUD with a gross density of approximately 4.43 residential units per acre.

### **AGE RESTRICTION**

No less than 80% of the residential units must be inhabited by at least one person 55 years of age or older.

### **BUILDING MATERIALS**

Exteriors of all homes and residential structures constructed on the subject property must be of brick, stone, hard coat stucco, or a cement-based material such as hardi-board. Accent materials such as, but not limited to, copper roofing, cedar shake, a cement-based material such as hardi-board, or a combination of such materials, may be used with such accent material not to exceed fifty percent (50%) of the facade. There shall be no vinyl or aluminum siding.

The roofing material used on all detached homes must be cedar shake, architectural/dimensional style asphalt shingles or metal as appropriate to the architectural style of each home.

### **PROPERTY OWNER ASSOCIATIONS**

The development shall have covenants that require maintenance of the landscaped entrance area, open space, and amenity areas by a homeowners association. Membership in the homeowners association is mandatory for owners of properties. Zero-Lot Residential Units and Stacked Flat Units may have separate sub-associations to manage their respective properties

### **AMENITIES**

An amenity area, including a swimming pool and club house, will be provided for use of residents and will be the responsibility of the homeowners association to maintain. On-street parking will be allowed for the amenity area.

An approximately 40,000 sf storage facility, with parking spaces initially for up to 19 , with a total of 50 at full build-out, Recreational Vehicles as well as up to 50 parking spaces for on-site boat storage will be available on the premises for lease *solely* to residents of the development.

Residents will also have the ability to utilize community docks and lease or purchase one of the approximately 130 boat slips for the development.

### **UNIT TYPE**

Residential units are designed to allow residents to “age in place.” Independent living products will include single-family detached homes, single-family attached homes, attached condominiums, and rental units. Rental units will also offer assisted living services, and memory care units.

## I. Detached Residential

| Type                             | Maximum # of Units |
|----------------------------------|--------------------|
| • POD A – Single Family Detached | 265 units          |
| • POD B – Single Family Detached | 40 units           |

### PERFORMANCE STANDARDS – DETACHED RESIDENTIAL

- Minimum lot width – 40 feet
- Minimum Heated Floor Area (1,500 sf)
- Maximum building height – 40 feet
- Each unit will have a minimum 2 car enclosed garage
- Each unit will have a minimum of 18 feet of driveway from the back of sidewalk to the building face or 20 feet from the back of the curb to the building when there is no sidewalk
- Setbacks, excluding steps, roof overhangs, chimneys, bay windows, and patios:
  - 15' front
  - 3' side
  - 10' building separation (foundation to foundation)
  - 10' interior rear



## II. Zero-Lot Line Residential

| Type                       | Maximum # of Units |
|----------------------------|--------------------|
| • Single Family Cottages   | 79 units           |
| • Terrace Homes – Detached | 81 units           |

The building footprint for each unit will comprise the boundaries of the individual lots; all other improved areas will be maintained by a mandatory homeowner association as “common area” and all undeveloped area will be maintained as “open space.”

### A. Single Family Cottages.

#### PERFORMANCE STANDARDS – ZERO-LOT LINE RESIDENTIAL

- Minimum unit width – 15 feet
- Minimum Heated Floor Area (500 sf)
- Maximum building height – 30 feet
- Each unit will have a minimum of 18 feet of driveway from the back of sidewalk to the building face or 20 feet from the back of the curb to the building when there is no sidewalk
- Setbacks, excluding steps, roof overhangs, chimneys, bay windows, and patios:
  - 0’ front
  - 0’ side
  - 0’ interior rear
  - 10’ building separation (foundation to foundation)





## B. Terrace Homes – Detached.

### PERFORMANCE STANDARDS – ZERO-LOT LINE RESIDENTIAL

- Minimum unit width – 24 feet
- Minimum Heated Floor Area (1,100 sf)
- Maximum building height – 30 feet
- Each unit will have a minimum 2 car enclosed garage
- Each unit will have a minimum of 18 feet of driveway from the back of sidewalk to the building face or 20 feet from the back of the curb to the building when there is no sidewalk
- Setbacks, excluding steps, roof overhangs, chimneys, bay windows, and patios:
  - 0' front
  - 0' side
  - 0' interior rear
  - 10' building separation (foundation to foundation)



### III. For-Rent Residential

For-Rent Residential units are multi-story apartment, with buildings operated by a professional management company. In all areas designated for For-Rent Residential use, all buildings and grounds will be maintained by a management company and all undeveloped areas will be maintained as “open space.”

| Type                                 | Maximum # of Units                                    |
|--------------------------------------|-------------------------------------------------------|
| • Independent Living – For Rent (IL) | 175 units, less MC units                              |
| • Assisted Living – For Rent (AL)    | 150 units, less MC units                              |
| • Memory Care – For Rent (MC)        | Up to 30 units, which count toward IL and AL maximums |

#### PERFORMANCE STANDARDS – FOR-RENT RESIDENTIAL

- Minimum Heated Floor Area – 700,000 sf
- Maximum building height – 75 feet
- Setbacks, excluding steps, roof overhangs, chimneys, bay windows, and patios:
  - 40’ front
  - 20’ side
  - 25’ interior rear
  - 50’ exterior rear
- Minimum Parking Requirements - 1 space per 1.5 residential unit, plus one space per employee





## **II. Commercial Performance Standards**

### **COMMERCIAL USE**

Commercial Uses within the Planned Unit Development are generally expected to be Retail/Office/Restaurant. In addition, an approximately 40,000 sf storage facility may be constructed within the PUD.

The following uses are not allowed within the commercial portion of the PUD:

- (a) Motels or hotels with rooms accessed from the exterior of the building.
- (b) Adult novelty stores.
- (c) Adult entertainment centers.
- (d) Pawn shops.
- (e) Gas Stations.
- (f) Tire Stores.
- (g) Massage Parlors; provided this will not prohibit the operation of any profession by practitioners licensed by the State of Georgia.
- (h) Vaping stores
- (i) Auto body shops.
- (j) Automobile sales establishments.
- (k) Marine sales or repair stores.
- (l) Non-automated car wash.

### **BUILDING MATERIALS**

Building exteriors not screened from view from a public right-of-way right of way or any property line shall have an architectural treatment of brick, brick/frame, stone, or stucco, or another architectural treatment approved by the Planning Director.

### **MECHANICAL EQUIPMENT**

Ground and building-mounted mechanical equipment, such as coolers, HVAC equipment, meters, utility banks, trash receptacles, and electrical or telephone utility cabinets must be placed within the interior side and rear yards; provided, such mechanical equipment may be located in the front or corner side yards if screened from any right-of-way or any property line with landscape materials.

## PERFORMANCE STANDARDS - COMMERCIAL

- Maximum Building Coverage – 70% of lot
- Maximum building height – 75 feet
- Minimum landscaped open space – 10% of lot
- Minimum front landscape strip paralleling right-of-way – 10 feet
- Minimum side and rear landscape strip – 6 feet
- Setbacks, excluding steps, roof overhangs, chimneys, bay windows, and patios:
  - 40' from right-of-way
  - 10' side
  - 25' interior rear
  - 50' adjacent to residential use
- Minimum Parking Requirements - See Gainesville Unified Land Development Code



**City Economic Impact Statement: Oak Hall Companies, LLC**

|                             |                    |  |                            |                        |  |                                     |                        |
|-----------------------------|--------------------|--|----------------------------|------------------------|--|-------------------------------------|------------------------|
| <b>Population</b>           | <b>36,306</b>      |  | <b>Millage Rate</b>        | <b>0.00298</b>         |  | <b>Total M&amp;O</b>                | <b>\$ 9,657,458.00</b> |
| <b>Households</b>           | <b>12,967</b>      |  |                            |                        |  | <b>Expenditures Per Child (40%)</b> | <b>\$ 3,401.41</b>     |
|                             |                    |  | <b>School Millage Rate</b> | <b>0.00685</b>         |  | <b>Police Expenditures</b>          | <b>\$ 8,471,549.00</b> |
| <b>Impact Fees per Unit</b> | <b>\$ 1,589.81</b> |  | <b>Sales Tax Revenue</b>   | <b>\$ 5,036,730.00</b> |  | <b>Fire Expenditures</b>            | <b>\$ 6,542,453.00</b> |

**Table 1: Projected Residential Population**

| <u>Year</u> | <u>New Houses</u>        | <u>Total Houses</u>            | <u>Population</u> |
|-------------|--------------------------|--------------------------------|-------------------|
| 1           | 77                       | 77                             | 216               |
| 2           | 77                       | 154                            | 431               |
| 3           | 77                       | 231                            | 647               |
| 4           | 78                       | 309                            | 865               |
| 5           | 78                       | 387                            | 1084              |
| 6           | 78                       | 465                            | 1302              |
|             |                          |                                |                   |
|             |                          |                                |                   |
| <u>Year</u> | <u>AL &amp; IL Units</u> | <u>Total AL &amp; IL Units</u> | <u>Population</u> |
| 1           |                          | 0                              | 0                 |
| 2           |                          | 0                              | 0                 |
| 3           | 109                      | 109                            | 114               |
| 4           | 217                      | 217                            | 228               |
| 5           | 325                      | 325                            | 341               |
| 6           | 0                        | 325                            | 341               |

**Table 2: Projected Annual General Property Tax Revenue from Residential**

| <u>Average Home Price</u> | <u>Year</u> | <u>Revenue</u> |
|---------------------------|-------------|----------------|
| <b>\$400,000.00</b>       | 1           | \$91,325.08    |
|                           | 2           | \$182,650.16   |
|                           | 3           | \$273,975.24   |
| <u>Tax per House</u>      |             |                |
| \$1,186                   | 4           | \$366,486.36   |
|                           | 5           | \$458,997.48   |

**Table 3: Projected Annual Sales Tax Revenue from Residential**

| <u>Year</u> | <u>Revenue</u> |
|-------------|----------------|
| 1           | \$29,908.86    |
| 2           | \$59,817.72    |
| 3           | \$89,726.59    |
| 4           | \$120,023.87   |
| 5           | \$150,321.16   |
| 6           | \$180,618.45   |

**Table 4: Projected Annual School Property Tax Revenue from Residential (Assume 40% Exempt from School Tax)**

| <u>Average Home Price</u>      | <u>Year</u> | <u>Revenue</u> |
|--------------------------------|-------------|----------------|
| <b>\$400,000.00</b>            | 1           | \$126,588.00   |
|                                | 2           | \$253,176.00   |
|                                | 3           | \$379,764.00   |
| <u>Avg. Prop Tax per House</u> |             |                |
| \$2,740                        | 4           | \$507,996.00   |
|                                | 5           | \$636,228.00   |
|                                | 6           | \$764,460.00   |

**Table 5: Projected Residential Impact Fees: One Time Fee per Annum**

| <u>Year</u> | <u>Total</u>  |
|-------------|---------------|
| 1           | \$ 122,415.37 |
| 2           | \$ 122,415.37 |
| 3           | \$ 122,415.37 |
| 4           | \$ 124,005.18 |
| 5           | \$ 124,005.18 |
| 6           | \$ 124,005.18 |

| Table 6: Projected Annual Sales Tax Revenue from IL & AL |              |
|----------------------------------------------------------|--------------|
| Year                                                     | Revenue      |
| 1                                                        |              |
| 2                                                        |              |
| 3                                                        | \$42,338.52  |
| 4                                                        | \$126,627.13 |
| 5                                                        | \$252,865.83 |
| 6                                                        | \$252,865.83 |

| Table 7: Projected Property Tax Revenue from IL & AL |                  |              |
|------------------------------------------------------|------------------|--------------|
| Year                                                 | Assessment Value | Revenue      |
| 1                                                    | \$ 900,000.00    | \$8,847.00   |
| 2                                                    | \$ 2,500,000.00  | \$24,575.00  |
| 3                                                    | \$ 15,000,000.00 | \$147,450.00 |
| 4                                                    | \$ 15,000,000.00 | \$147,450.00 |
| 5                                                    | \$ 15,000,000.00 | \$147,450.00 |
| 6                                                    | \$ 15,000,000.00 | \$147,450.00 |

| Table 8: Projected IL & AL Impact Fees: One Time Fee per Annum |               |
|----------------------------------------------------------------|---------------|
| Year                                                           | Total         |
| 1                                                              | \$ -          |
| 2                                                              | \$ 173,289.29 |
| 3                                                              | \$ 344,988.77 |
| 4                                                              | \$ 516,688.25 |
| 5                                                              | \$ -          |
| 6                                                              | \$ -          |

| Table 9: Projected Property Tax Revenue from Commercial |      |              |
|---------------------------------------------------------|------|--------------|
| Average Value per SF                                    | Year | Revenue      |
| \$120.00                                                | 1    | \$23,592.00  |
|                                                         | 2    | \$46,004.40  |
| Total SF                                                | 3    | \$67,296.18  |
| 120,000.00                                              | 4    | \$87,523.37  |
|                                                         | 5    | \$106,739.20 |
| Depreciation                                            | 6    | \$124,994.24 |
| 5%                                                      |      |              |

| Table 10: Projected Commercial Impact Fees: One Time Fee per Annum |      |            |
|--------------------------------------------------------------------|------|------------|
| Average Fee per 1000 SF                                            | Year | Revenue    |
| \$94.46                                                            | 1    | \$1,889.20 |
|                                                                    | 2    | \$1,889.20 |
| Total SF                                                           | 3    | \$1,889.20 |
| 120,000.00                                                         | 4    | \$1,889.20 |
|                                                                    | 5    | \$1,889.20 |
|                                                                    | 6    | \$1,889.20 |

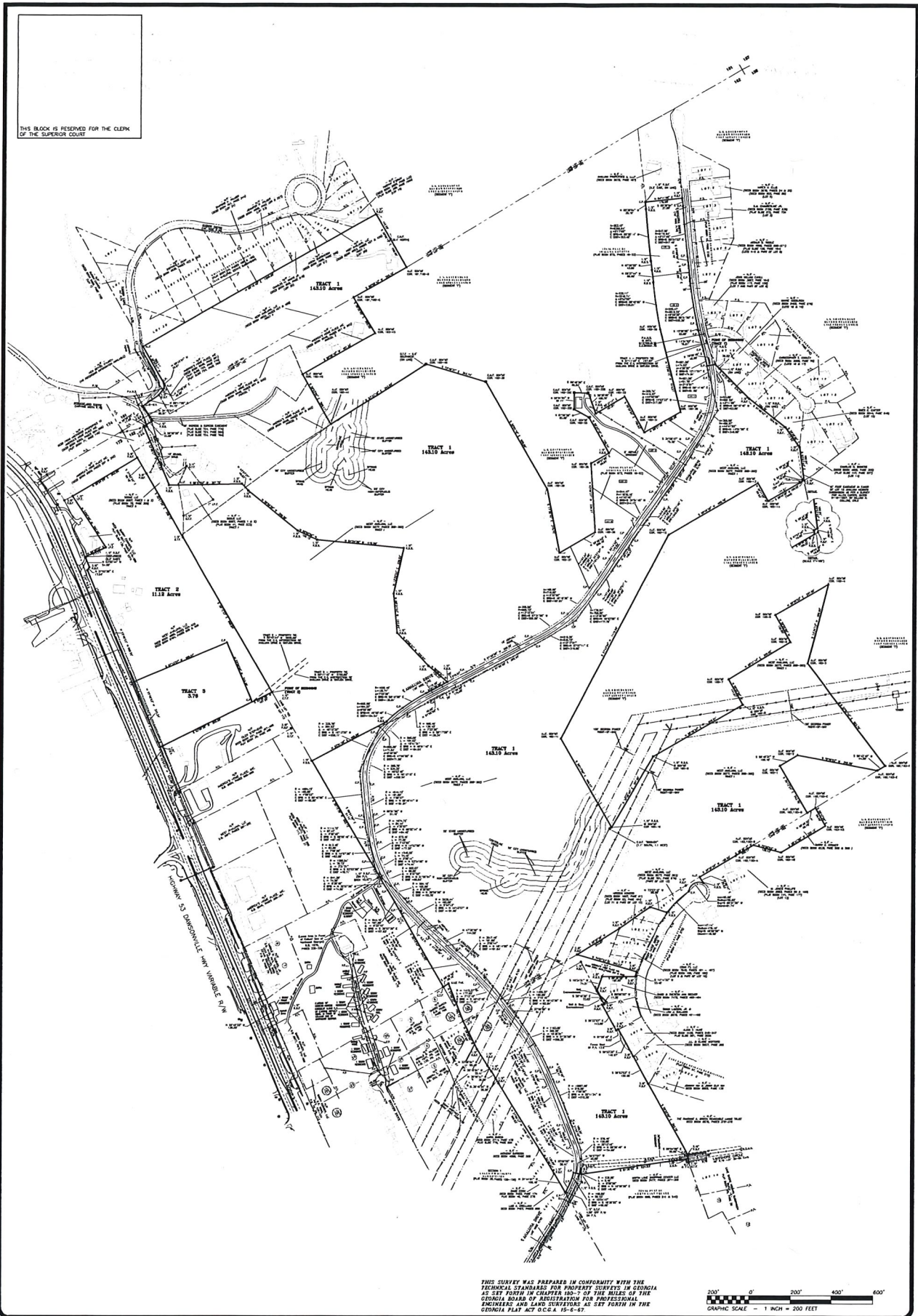
| Table 11: Cost of Law Enforcement Services |                  |                                     |
|--------------------------------------------|------------------|-------------------------------------|
| Year                                       | Total Households | Annual Law Enforcement Expenditures |
| 1                                          | 77               | \$50,305.33                         |
| 2                                          | 154              | \$100,610.67                        |
|                                            |                  |                                     |
| 3                                          | 340              | \$222,127.45                        |
| 4                                          | 526              | \$343,644.23                        |
| 5                                          | 712              | \$465,161.02                        |
| 6                                          | 790              | \$516,119.67                        |

| Table 12: Cost of Fire Protection Services |                  |                          |
|--------------------------------------------|------------------|--------------------------|
| Year                                       | Total Households | Annual Fire Expenditures |
| 1                                          | 77               | \$38,850.07              |
| 2                                          | 154              | \$77,700.14              |
|                                            |                  |                          |
| 3                                          | 340              | \$171,545.77             |
| 4                                          | 526              | \$265,391.40             |
| 5                                          | 712              | \$359,237.03             |
| 6                                          | 790              | \$398,591.65             |

| Table 13: M&O Expenditures |                  |                         |
|----------------------------|------------------|-------------------------|
| Year                       | Total Households | Annual M&O Expenditures |
| 1                          | 77               | \$57,347.44             |
| 2                          | 154              | \$114,694.88            |
|                            |                  |                         |
| 3                          | 340              | \$253,222.47            |
| 4                          | 526              | \$391,750.05            |
| 5                          | 712              | \$530,277.64            |
| 6                          | 790              | \$588,369.85            |

| Table 14: Summary of Annual Impact at Completion                |         |                |
|-----------------------------------------------------------------|---------|----------------|
| Impact Summary                                                  | Column1 | Totals         |
| <b>Revenues</b>                                                 |         |                |
| Property Taxes to                                               |         | \$1,495,901.72 |
| Sales Taxes to City                                             |         | \$433,484.28   |
| Total Revenue                                                   |         | \$1,929,386.00 |
|                                                                 |         |                |
| <b>Expenditures</b>                                             |         |                |
| Police                                                          |         | \$516,119.67   |
| Fire                                                            |         | \$398,591.65   |
| M&O                                                             |         | \$588,369.85   |
| School Expenditures<br>(1% of Homes have a<br>school-age child) |         | \$44,284.37    |
| Total Expenditures                                              |         | \$1,547,365.53 |
|                                                                 |         |                |
| Annual Net Revenue                                              |         | \$382,020.47   |
|                                                                 |         |                |
| Total Impact Fees                                               |         | \$1,785,563.16 |

THIS BLOCK IS RESERVED FOR THE CLERK  
OF THE SUPERIOR COURT



THIS SURVEY WAS PREPARED IN CONFORMITY WITH THE  
TECHNICAL STANDARDS FOR PROPERTY SURVEYS IN GEORGIA  
AS SET FORTH IN CHAPTER 180-1 OF THE RULES OF THE  
GEORGIA BOARD OF REGISTRATION FOR PROFESSIONAL  
ENGINEERS AND LAND SURVEYORS AS SET FORTH IN THE  
GEORGIA PLAT ACT S.C.A. 18-6-87

GRAPHIC SCALE - 1 INCH = 200 FEET

SHEET NUMBER:

3 of 3

SCALE: 1" = 200'

SURVEY DATE: 12/30/2016

PLAT DATE: 12/30/2016

12-037-00013.dwg

JN. 12-037

REVISIONS

No. DATE DESCRIPTION

1 01/03/2017 REVISED PER COMMENTS

2 01/16/2017 SPLIT TRACT 2 INTO TWO TRACTS

REVISIONS

RETRACEMENT SURVEY FOR:  
**OAK HALL COMPANIES, LLC**  
(PROPOSED RE-ZONING PARCELS)

- LOCATED IN -

LAND LOTS 161, 162, 163 AND 173  
9TH LAND DISTRICT  
CITY OF GAINESVILLE  
HALL COUNTY, GEORGIA



REGISTERED PROFESSIONAL  
LAND SURVEYORS

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GAINESVILLE, GA 30503  
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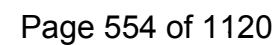
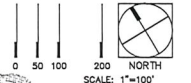






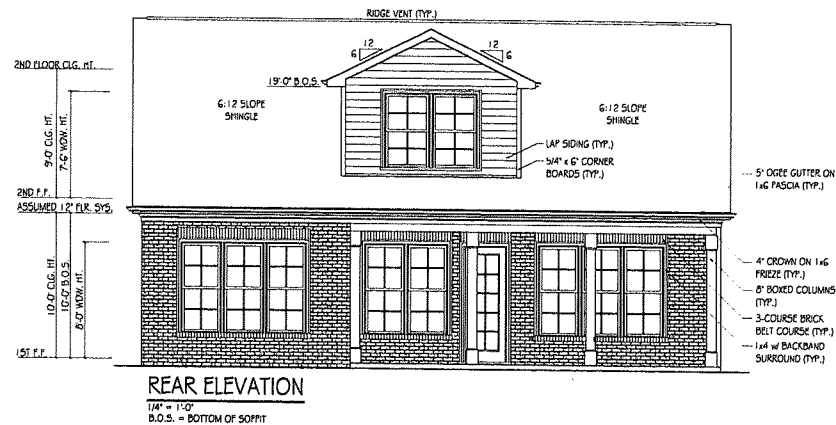
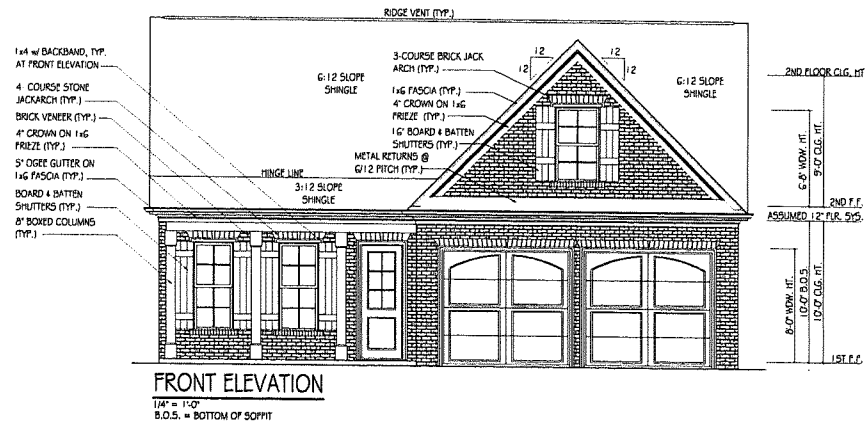
## Zoning Plan

Prepared for  
Oak Hall Companies, LLC  
5256 Peachtree Road, Suite 193  
770-662-5993  
Atlanta, GA 30341  
DATE: 4/17/2017







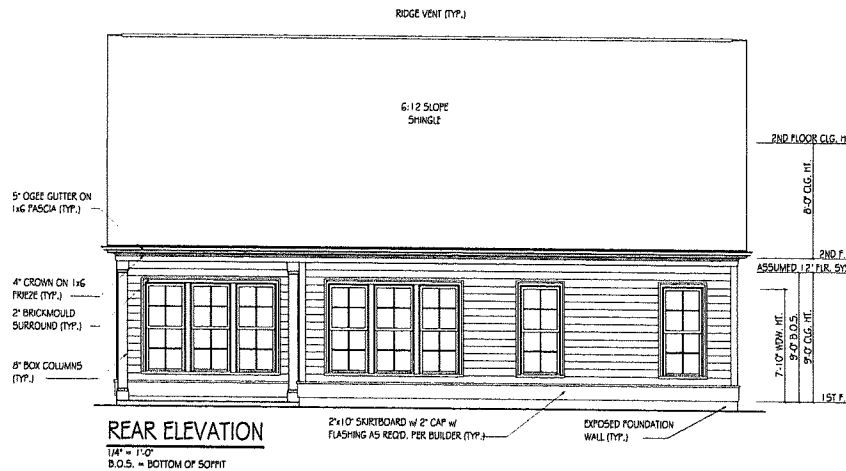
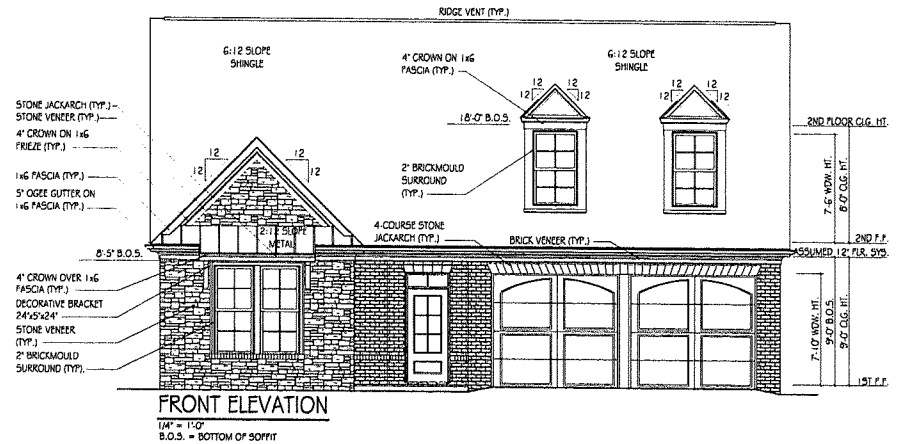


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| TUBE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | JOB #                       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| 1203                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 15143                       |
| DATE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | REVISED                     |
| 08/19/16                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                             |
| SQUARE FOOTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                             |
| 2303 SF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                             |
| LOT #                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | SUBDIVISION                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | THE OVERLOOK AT OLD ATLANTA |
| PROJECT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                             |
| CUSTOM HOME FOR JIM CHAPMAN COMMUNITIES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                             |
| THE NEWBURY -A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                             |
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| 404-226-8864<br>(DAVID)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 404-401-7288<br>(MARY)      |
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| DRAWN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | SHEET #                     |
| BCLLC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | D1 of 6                     |

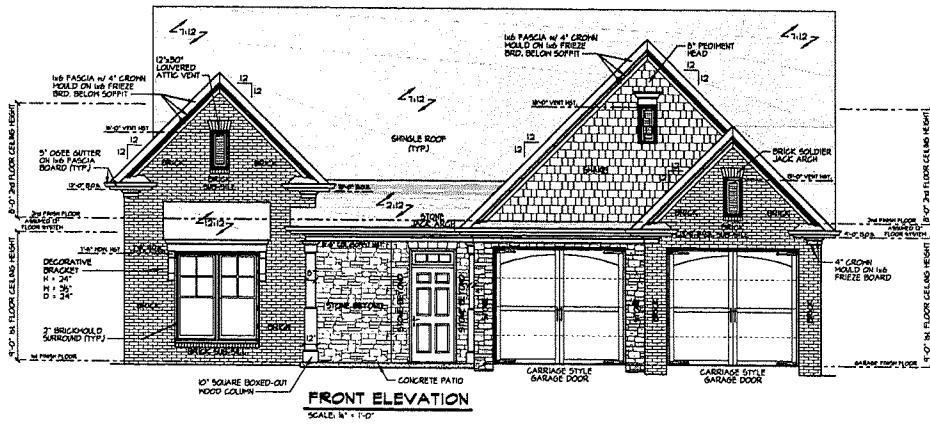
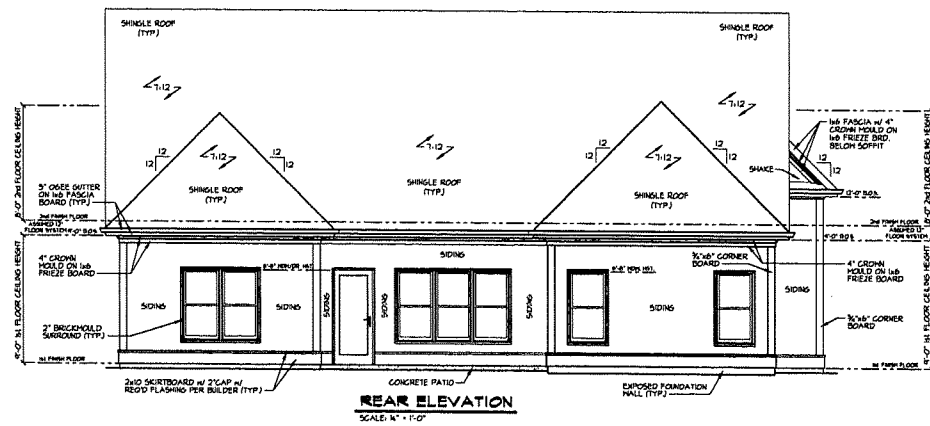






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|                                                                                                                                                                                                                                                                        |                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| TUBE                                                                                                                                                                                                                                                                   | JOB #             |
| 1284                                                                                                                                                                                                                                                                   | 16179             |
| DATE                                                                                                                                                                                                                                                                   | REVISED           |
| 09/10/16                                                                                                                                                                                                                                                               |                   |
| SQUARE FOOTAGE                                                                                                                                                                                                                                                         |                   |
| 2375 SF                                                                                                                                                                                                                                                                |                   |
| LOT #                                                                                                                                                                                                                                                                  | SUBDIVISION       |
|                                                                                                                                                                                                                                                                        | NESTLE DOWN FARMS |
| PROJECT                                                                                                                                                                                                                                                                |                   |
| CUSTOM HOME FOR JIM CHAPMAN COMMUNITIES                                                                                                                                                                                                                                |                   |
| THE HANOVER - A                                                                                                                                                                                                                                                        |                   |
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| (DAVID)                                                                                                                                                                                                                                                                | (MARY)            |
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| DRAWN                                                                                                                                                                                                                                                                  | SHEET #           |
| BCLLC                                                                                                                                                                                                                                                                  | D1 OF 5           |

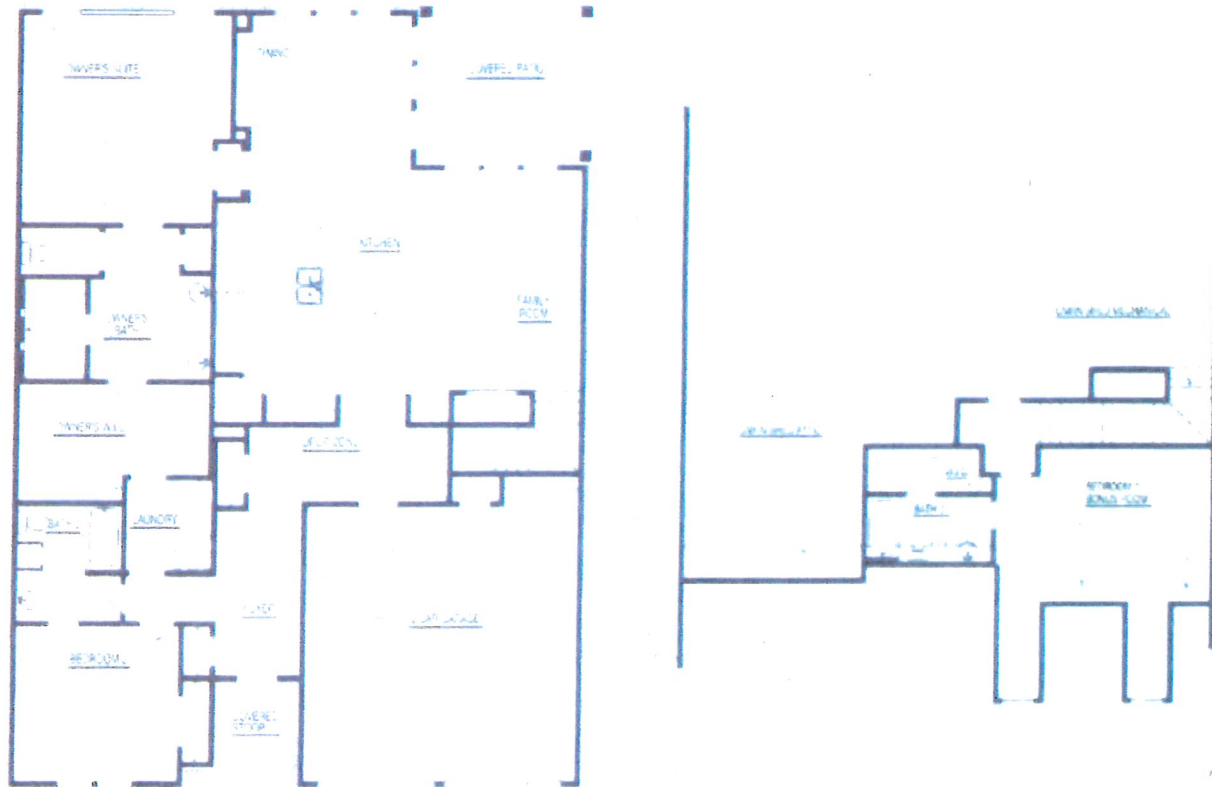
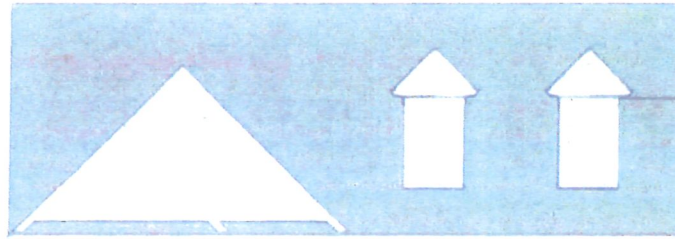


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| TIME                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | JOB #                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| 1277                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 16172                  |
| DATE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | REVISED                |
| 9/12/16                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        |
| SQUARE FOOTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                        |
| 2,576 Square Feet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                        |
| LOT #                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | SUBDIVISION            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Nestle Down Farms      |
| PROJECT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        |
| Custom Home for                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                        |
| JIM CHAPMAN Communities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        |
| Brighton "A"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        |
| "2-Car Garage"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                        |
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| DRAWN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | SHEET #                |
| MKH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | D1 of 6                |
| FRONT & REAR ELEV.'S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                        |

### Attached Villas

2,339 Square Feet



JIM  
CHAPMAN

limChapmanCommunities.com



# THE OVERLOOK AT OLD ATLANTA Attached Villas

*Avery Plan*  
2,305 Square Feet



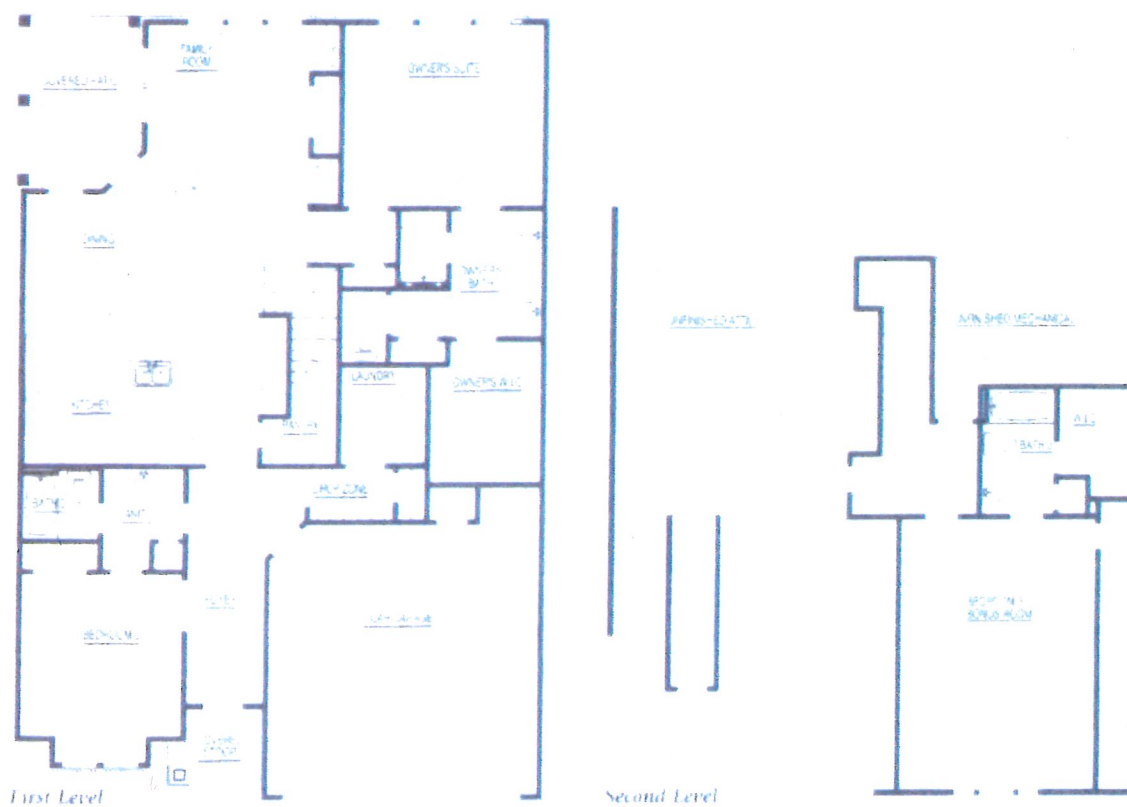
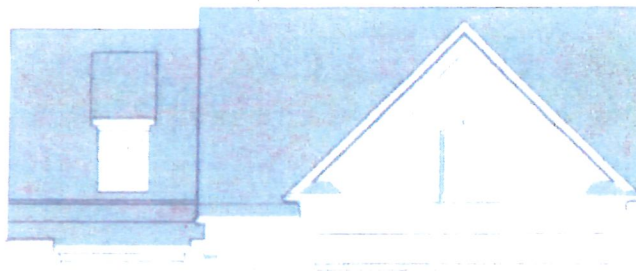
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**Dalton Plan**  
2,270 Square Feet



**JIM  
CHAPMAN**  
JIMMY KILLS

Bob Long Teo Building Futures  
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## **Traffic Impact Study**

### **Proposed Lanier Tract Multi-Use Development City of Gainesville, Georgia**

revised April 7, 2017  
for 3/31/2017 site plan

**MARC R. ACAMPORA, PE, LLC**  
**TRAFFIC ENGINEERING**



**Traffic Impact Study**

**Proposed Lanier Tract Multi-Use Development**  
**City of Gainesville, Georgia**

study prepared for:

Oak Hall Companies, LLC  
5256 Peachtree Road, Suite 195  
Atlanta, Georgia 30341

revised April 7, 2017  
for 3/31/2017 site plan



**MARC R. ACAMPORA, PE, LLC**  
TRAFFIC ENGINEERING

858 Myrtle Street, NE  
Atlanta, Georgia 30308  
(678) 637-1763

e-mail: [acamporatraffic@comcast.net](mailto:acamporatraffic@comcast.net)  
web: [www.acamporatraffic.com](http://www.acamporatraffic.com)

## Summary

The Lanier Tract DRI is a primarily senior-age-restricted residential community that will be developed along Ahaluna Drive and Strickland Drive. There will be an office/retail node along GA 53, north of Avonlea Way. A fire station of 10,650 square feet is also proposed to be constructed along GA 53. Vehicular access will be provided at several locations, primarily along Ahaluna Drive, with connections to GA 53 via Strickland Drive, at the median opening at Avonlea Way, and through adjacent outparcels, aligning with Canterbury Road. The office/retail node will have a two right-in / right-out accesses directly on GA 53, with no anticipated internal connection to the balance of the development.

The project will generate 171 new trips in the a.m. peak hour, 251 new trips in the p.m. peak hour, and 3,097 new trips during a 24-hour weekday.

The following recommendations are made at each study intersection:

1. **Sportsman Club Road at Strickland Drive** – No changes are recommended at this intersection for the Existing, No-Build, or Future Phase One and Future Phase Two conditions.
2. **Dawsonville Highway at Sportsman Club Road** – The side street delays at this intersection are significant but the low side street volumes make the intersection a weak candidate for signalization. A northbound exclusive right turn lane should be added on GA 53 at Sportsman Club Road.
3. **Dawsonville Highway at Avonlea Way** – Side street delays are high at the existing eastbound approach of Avonlea Way. The volumes exiting the new Lanier Tract access will be low and many of them will be right turners. Therefore, this intersection is a weak candidate for signalization. A northbound right turn lane on GA 53 should be considered at this access and the site plan includes this lane. The new site access should be constructed with one entering lane and one exiting lane. The side street approach exiting the site should be controlled by side street stop sign and accompanying stop bar.
4. **Dawsonville Highway at Canterbury Road** – Side street delays are high on the existing eastbound approach of Canterbury Road. This intersection is a weak candidates for signalization in the existing, no-build, and Future Phase One conditions. No decel lane will be required for Future Phase One. With the future development of the retail outparcels, by others, a northbound deceleration lane on GA 53 is recommended. This intersection will be a prime candidate for signalization upon development of the outparcels. A signal warrant study should be performed for this intersection according to the standards set forth in the Federal Highway Administration's *Manual On Uniform Traffic Control Devices* (MUTCD). This new access at the Canterbury Road median break should be constructed with at least one entering lane and an exiting shared left/through lane and an exclusive right turn lane. The two westbound lanes are in anticipation of the development of the outparcels. With only the Lanier Tract volumes, only one entering and one exiting lane would be required. Until signalization is warranted, the side street approach exiting the outparcel tracts should be controlled by side street stop sign and accompanying stop bar.

5. **Dawsonville Highway at Ahaluna Drive** – A northbound right turn lane should be added on GA 53 at Ahaluna Drive in the existing condition. The future volumes exiting Ahaluna Drive would benefit from the addition of a second westbound lane, resulting in a shared left/through lane and an exclusive right turn lane on Ahaluna Drive at GA 53. There may be an opportunity to shorten the cycle length, which would reduce time spent by vehicles waiting on the side street.
6. **Dawsonville Highway at North Lake Square Access** – This intersection operates acceptably in all analysis conditions. No mitigation is recommended for any analysis condition.
7. **Dawsonville Highway at Beachwood Boulevard** – No changes are recommended at this intersection based on this study.
8. **Dawsonville Highway at McEver Road** – The existing southbound right turn volume is sufficiently-high (828 a.m., 481 p.m.) to merit consideration of the addition of a second exclusive right turn lane and/or the addition of a protected right turn overlap phase. There may be an opportunity to reduce the cycle length and fine-tune the signal timing at this intersection.
9. **Dawsonville Highway at Green Hill Circle** – This signalized intersection incurs high sides street delays, again, due to the allocation of the majority of greentime to the Dawsonville Highway approaches. There may be an opportunity to reduce the cycle length and fine-tune the signal timing at this intersection.
10. **Dawsonville Highway at Shallowford Road** – The lane configuration and signal phasing are appropriate for this intersection. Reduction of the cycle length and optimization of the allocation of greentime could reduce delays and queuing at this intersection.

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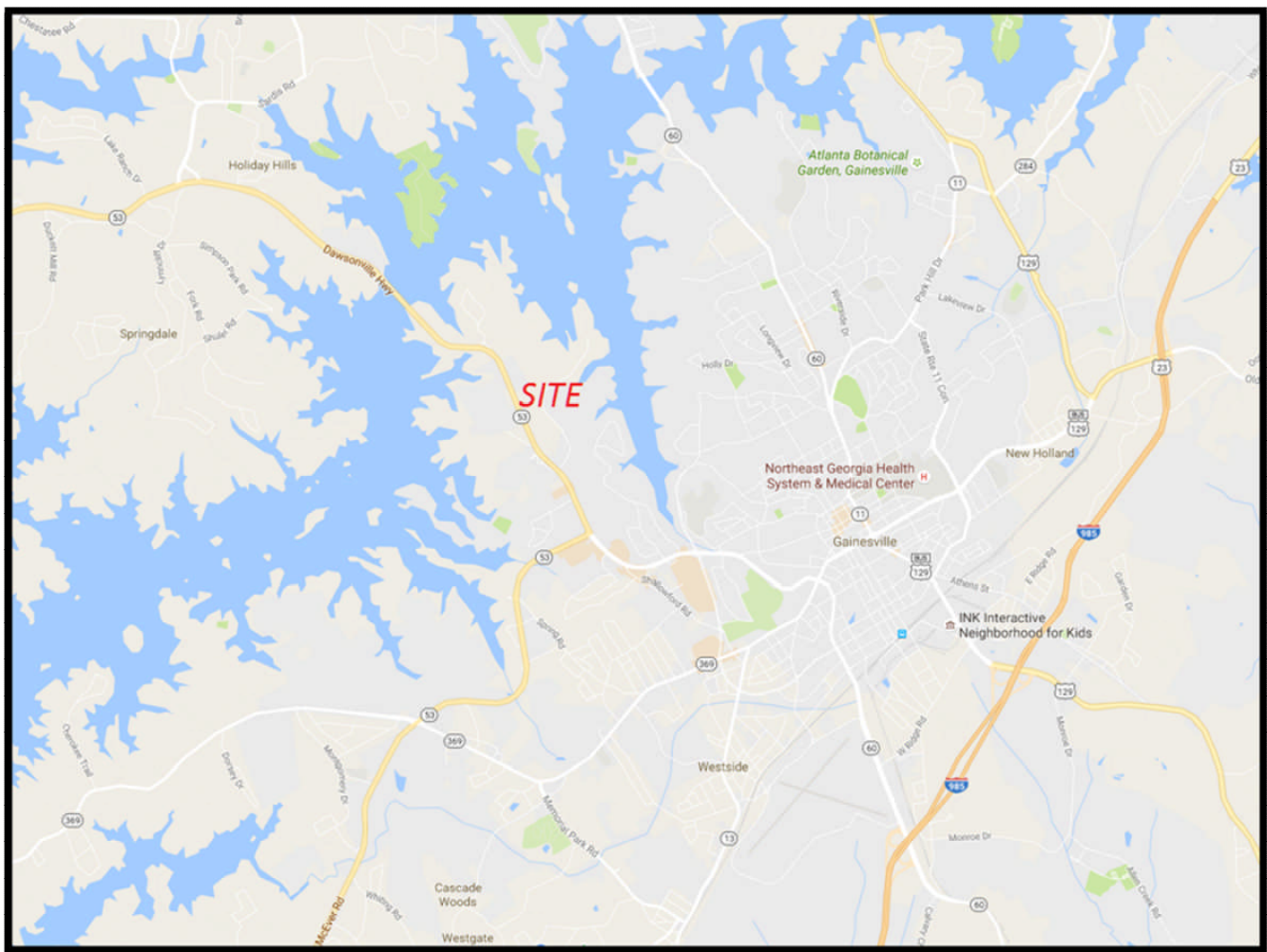
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## Introduction

This study assesses the traffic impact of a proposed multi-use Development of Regional Impact (DRI) in the City of Gainesville, Georgia. The site is located along the east side of Dawsonville Highway (Georgia State Route 53), and the east and west sides of Ahaluna Drive, as shown in the location map in Figure 1. The project will include a mix of senior living facilities, including senior-age-restricted single family homes, cottages, terrace homes, independent living apartments, and assisted living. In addition, the project will include a retail and office tract. This impact study includes the adjacent Willow Springs townhome development, to the north, and seven retail outparcels to be developed by others, located along the east side of GA 53.

The purpose of this traffic impact study is to determine existing traffic operating conditions in the vicinity of the proposed development, project future “no-build” and “build” traffic volumes, assess the impact of the subject development, then develop conclusions and recommendations to mitigate the project traffic impact and ensure safe and efficient existing and future traffic conditions in the vicinity of the project.



**Figure 1 – Lanier Tract Location Map**

## Existing Traffic Conditions

Existing traffic operating conditions in the vicinity of the proposed Lanier Tract development were assessed. The following is a description of existing facilities, volumes, and intersection operations.

### Description of Roadway Facilities

Georgia State Route 53 (Dawsonville Highway adjacent to the site) is a northwest to southeast principal arterial that extends from northwest Georgia, crosses US 19 and Lake Lanier, then passes the subject site and continues to the southeast. The State Route 53 designation turns to the southwest and continues along McEver Road to Mundy Mill Road, then follows Mundy Mill Road through its interchange with Interstate 985, and continues to the southeast. Adjacent to the subject development, GA 53 has two through travel lanes in each direction, is divided with a grassed median, and has exclusive turn lanes at major intersections. The terrain along this section of GA 53 is gently rolling and the posted speed limit is 45 mph.

Ahaluna Drive is a two lane rural local roadway that begins at a signalized intersection at GA 53 and winds through undeveloped land and low density residential development, to its terminus near the shore of Lake Lanier. The road is gently winding with rolling terrain. The proposed Lanier Tract development will develop some of the land on both sides of Ahaluna Drive, and the signal at GA 53 will provide one of the primary access points for this development to the roadway system.

Strickland Drive and Sportsman Club Road are two-lane residential streets that will provide access for the northern part of the proposed Lanier Tract DRI to GA 53. Strickland Drive is side street stop sign controlled at Sportsman Club Road and Sportsman Club Road is side street stop sign controlled at a median break on GA 53. Both roads are gently winding with gently rolling terrain and Strickland Drive becomes unpaved at its eastern terminus. The intersection of Sportsman Club Road at Strickland Drive is located in very close proximity to the intersection of Sportsman Club Road and Old Dawsonville Highway. However, lines of sight between the two intersections are clear and the volumes at these two locations are very low.

The following are photographs of intersections and roadways in the study area.





**Photograph 1 – Sportsman Club Road Facing Strickland Drive From Old Dawsonville Highway**



**Photograph 2 – View From Sportsman Club Road Facing North Along GA 53**



Photograph 3 – View From Avonlea Way Facing North Along GA 53



Photograph 4 – GA 53 Facing North at Ahaluna Drive





**Photograph 5 – Ahaluna Drive Facing West with Retail Access to Left, SR 53 Ahead**



**Photograph 6 – Typical Section Along Ahaluna Drive**



**Photograph 7 – View From Beechwood Drive Facing Under-Construction Retail Across GA 53**



**Photograph 8 – Eastbound McEver Road at Dawsonville Highway**





**Photograph 9 – Northbound Dawsonville Highway at Shallowford Road**

### Existing Traffic Volumes

The City of Gainesville's Unified Land Development Code (ULDC) specifies that the study area to be included in a traffic impact study will be determined by calculating the peak hour and daily trips that the project will generate, then applying the table provided in the code, shown as Table 1, below, to determine the distance from the project that must be included in the study area.

**Table 1 – ULDC Study Area Size Requirements**

| Peak Hour Trips Generated | Daily Trips Generated | Distance from Perimeter of Proposed Development Along Roads |
|---------------------------|-----------------------|-------------------------------------------------------------|
| 100 - 150                 | 1,000 – 1,500         | ½ mile                                                      |
| 151 - 500                 | 1,501 – 5,000         | 1 mile                                                      |
| 501 – 1,000               | 5,001 – 10,000        | 2 miles                                                     |
| 1001 or more              | 10,001 or more        | 3 miles                                                     |

from the City of Gainesville ULDC

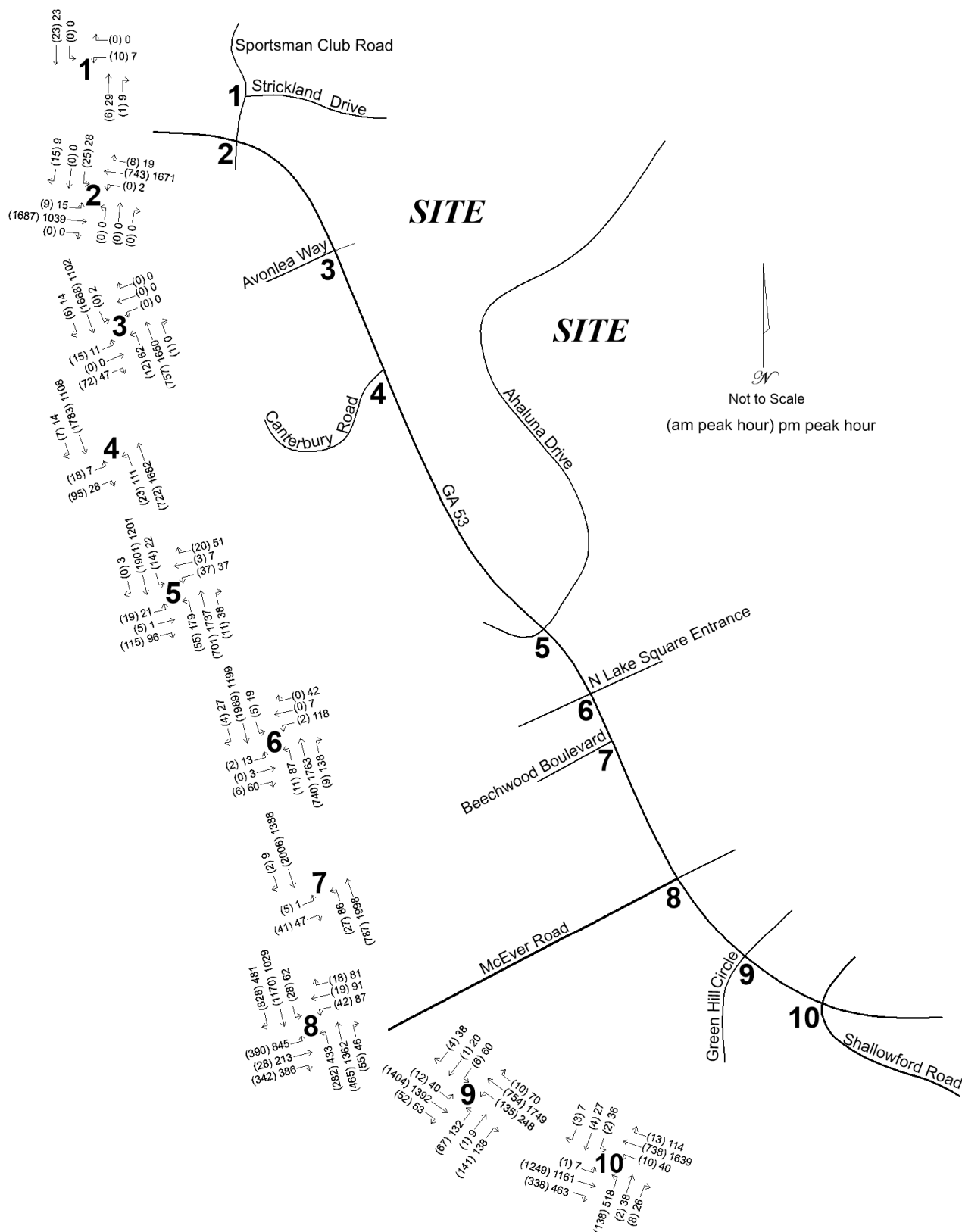
The trip generation for the proposed development is presented later in this report, summarized in Table 6. The peak hour trip generation for the project was calculated at 251 trips and the 24-hour volume is 3,097 trips. Based on these numbers, applied to the ULDC standard presented above, the study network was determined to

extend for one mile from the limits of the proposed site. The one mile limits were presented to the City and, based on that information, the intersections to be included in this study were agreed upon with the City as follows:

1. Sportsman Club Road at Strickland Drive
2. Dawsonville Highway at Sportsman Club Road
3. Dawsonville Highway at Avonlea Way
4. Dawsonville Highway at Canterbury Road
5. Dawsonville Highway at Ahaluna Drive
6. Dawsonville Highway at North Lake Square Shopping Center Entrance
7. Dawsonville Highway at Beachwood Boulevard
8. Dawsonville Highway at McEver Road
9. Dawsonville Highway at Green Hill Circle
10. Dawsonville Highway at Shallowford Road

Existing full turning movement traffic volume counts were collected at each of these intersections. The counts at most intersections were collected on Thursday, November 17, 2016, from 7:00 a.m. to 9:00 a.m. and from 4:30 p.m. to 6:30 p.m. The counts at the North Lake Square entrance were collected on Wednesday, March 22, 2017. Area schools were in standard session on the dates of the traffic counts. From the count data, the highest four consecutive 15-minute interval volumes at each intersection, during each time period, were determined. These volumes make up the typical weekday a.m. and p.m. peak hour traffic volumes at that intersection. The existing a.m. and p.m. peak hour turning movement volumes are shown in Figure 2. The intersection raw count data is found in Appendix A. It is noted that these existing volumes were compared with the volumes in the Preliminary Timing Report, SR 53 Connector – SR 60, Hall County, Georgia, dated April 2016, as provided by the City of Gainesville's traffic consultant. The magnitude of the side street volumes were found to be very comparable with the counts performed for this current study, and generally slightly higher. However, the volumes on the major streets were consistently notably higher for this current study.

Historic Georgia DOT 24-hour traffic counts were also collected in the vicinity. These counts are summarized in Table 3 in the No-Build Conditions section of this report. The 2015 (the latest year for which Georgia DOT data is available) Georgia DOT Average Annual Daily Traffic (AADT) volume on SR 53 north of Sportsman Club Road was 25,600 vehicles per day (vpd).



## Existing Intersection Operations

Existing traffic operations were analyzed at the counted intersections using Synchro software, version 8, in accordance with the methodology presented in the Transportation Research Board's 2010 *Highway Capacity Manual (HCM 2010)*. The *HCM 2010* methodology is presented in Appendix B. The results of the analysis are shown in Table 2. Computer printouts containing detailed results of the analysis are located in Appendix C.

**Table 2 – Existing Intersection Operations**

| Intersection / Approach                       | A.M. Peak Hour |              | P.M. Peak Hour |              |
|-----------------------------------------------|----------------|--------------|----------------|--------------|
|                                               | LOS            | Delay s/veh  | LOS            | Delay s/veh  |
| 1. Sportsman Club Road at Strickland Drive    | A              | 2.6          | A              | 1.6          |
| southbound left turn                          | A              | 0.0          | A              | 0.0          |
| westbound approach                            | A              | 8.8          | A              | 8.9          |
| 2. Dawsonville Highway at Sportsman Club Road | A              | 5.3          | C              | 17.3         |
| northbound approach (turn lane)               | A              | 0.0          | A              | 0.0          |
| southbound approach (Sportsman Club Road)     | <b>F</b>       | <b>224.6</b> | <b>F</b>       | <b>901.3</b> |
| eastbound left turn (GA 53)                   | A              | 9.7          | C              | 15.7         |
| westbound left turn (GA 53)                   | A              | 0.0          | B              | 10.7         |
| 3. Dawsonville Highway at Avonlea Way         | A              | 2.5          | A              | 1.2          |
| northbound left turn (GA 53)                  | C              | 17.6         | B              | 11.4         |
| eastbound left turn                           | <b>F</b>       | <b>275.4</b> | <b>F</b>       | <b>144.1</b> |
| eastbound right turn                          | D              | 26.4         | B              | 13.7         |
| 4. Dawsonville Highway at Canterbury Road     | A              | 3.8          | A              | 1.2          |
| northbound left turn (GA 53)                  | C              | 18.5         | B              | 12.4         |
| eastbound left turn                           | <b>F</b>       | <b>363.9</b> | <b>F</b>       | <b>183.8</b> |
| eastbound right turn                          | D              | 30.1         | B              | 13.5         |
| 5. Dawsonville Highway at Ahaluna Drive       | B              | 16.5         | B              | 12.7         |
| northbound approach (GA 53)                   | A              | 4.6          | A              | 8.6          |
| southbound approach (GA 53)                   | B              | 15.9         | B              | 10.4         |
| eastbound approach                            | D              | 43.6         | C              | 26.1         |
| westbound approach                            | <b>F</b>       | <b>127.8</b> | <b>F</b>       | <b>97.4</b>  |
| 6. Dawsonville Highway at North Lake Square   | A              | 1.7          | B              | 14.8         |
| northbound approach (GA 53)                   | A              | 0.8          | B              | 12.9         |
| southbound approach (GA 53)                   | A              | 1.8          | A              | 8.7          |
| eastbound approach                            | E              | 69.5         | C              | 22.9         |
| westbound approach                            | E              | 70.0         | E              | 68.3         |
| 7. Dawsonville Highway at Beachwood Boulevard | A              | 1.4          | A              | 0.7          |
| northbound left turn (GA 53)                  | C              | 23.0         | B              | 14.0         |
| eastbound left turn                           | <b>F</b>       | <b>393.1</b> | <b>F</b>       | <b>235.1</b> |
| eastbound right turn                          | D              | 28.6         | C              | 16.4         |
| 8. Dawsonville Highway at McEver Road         | D              | 37.1         | <b>F</b>       | <b>98.0</b>  |
| northbound approach (GA 53)                   | E              | 57.3         | <b>F</b>       | <b>105.0</b> |
| southbound approach (GA 53)                   | B              | 17.1         | D              | 54.2         |



|                                             |   |      |          |              |
|---------------------------------------------|---|------|----------|--------------|
| eastbound approach                          | E | 68.5 | <b>F</b> | <b>145.0</b> |
| westbound approach                          | E | 60.1 | E        | 67.2         |
| 9. Dawsonville Highway at Green Hill Circle | B | 11.6 | D        | 40.7         |
| northbound approach (GA 53)                 | A | 6.2  | C        | 31.6         |
| southbound approach (GA 53)                 | B | 10.9 | D        | 48.1         |
| eastbound approach                          | D | 39.5 | E        | 56.2         |
| westbound approach                          | D | 38.1 | E        | 61.3         |
| 10. Dawsonville Highway at Shallowford Road | B | 10.6 | D        | 48.6         |
| northbound approach (GA 53)                 | A | 5.5  | C        | 32.7         |
| southbound approach (GA 53)                 | A | 6.2  | D        | 50.7         |
| eastbound approach                          | E | 75.9 | <b>F</b> | <b>86.2</b>  |
| westbound approach                          | D | 49.9 | E        | 78.0         |

The analysis of the existing conditions reveals generally acceptable traffic operations at the study intersections. However, Dawsonville Highway, McEver Road, and Shallowford Road carry significant through traffic. At unsignalized intersections, the heavy major roadway volumes contribute to high side street delays. At signalized intersections, the side street delays are also high, even at locations with moderate side street volumes, due to the heavy greentime demands placed on the signals by the major street volumes. The existing conditions at each intersection are discussed briefly as follows:

1. **Sportsman Club Road at Strickland Drive** – Operations at this intersection are excellent due to extremely low volumes. This intersection is located very close to the stop sign controlled intersection of Sportsman Club Road at Old Dawsonville Highway. However, the volumes at that intersection are extremely low, also, and the lines of sight between the two intersections are clear. Therefore, no changes are recommended at this intersection for the existing condition.
2. **Dawsonville Highway at Sportsman Club Road** – The overall operations at this intersection are good, but the Sportsman Club Road southbound approach operates with high delays. This is not unusual for side street stop sign controlled approaches at major thoroughfares such as GA 53, and the volumes incurring the high delays are low. The only way to achieve side street delays better than LOS F is to signalize this intersection. However, signalization would introduce new delays to GA 53 and could also increase the potential for rear-end collisions on GA 53. Signalization would require satisfaction of applicable warrants, as proscribed in the Federal Highway Administration's *Manual On Uniform Traffic Control Devices* (MUTCD). While a warrant analysis was not performed as part of this traffic impact study, the low side street volumes make this intersection a weak candidate for signalization in the existing condition. A review of Georgia DOT auxiliary lane standards is provided later in this report, which concludes that a northwest-bound exclusive right turn lane is likely to be justified, based on existing volumes, on GA 53 at Sportsman Club Road.
3. **Dawsonville Highway at Avonlea Way, 4. Dawsonville Highway at Canterbury Road, and 7. Dawsonville Highway at Beachwood Boulevard** – The operations at these three unsignalized intersections are comparable with one another, with the GA 53 approaches operating well, moderate delays for the side

street right turn movements, and high delays for the side street left turn movements. These side street left turn delays are high for the same explanation just provided for Sportsman Club Road. As with that intersection, signalization would be required at these three intersections, in order to reduce the side street left turn delays to better than LOS F. At all three of these intersections, the side street approach volumes are predominately right turners, with extremely low left turn volumes. For this reason, these three intersections are considered unlikely candidates for signalization in the existing condition. No signal warrant analyses were performed at these intersections as part of this traffic study.

5. **Dawsonville Highway at Ahaluna Drive** – While this intersection is signalized, the greentime on the signal heavily favors the GA 53 approaches. This is appropriate given the volume disparity between the GA 53 approaches and the significantly-lower-volume side street approaches. This results in high side street delays, particularly on the westbound approach exiting Ahaluna Drive. A second westbound lane, striped as an exclusive right turn lane, would allow the signal to process more side street traffic with its limited greentime allocation. In addition, this second lane would allow for more right-turns-on-red which are currently trapped behind left and through trips. The addition of this right turn lane would require relocation of the steel strain pole for the signal, a drainage structure, and possibly a large brick monument sign, which could reduce the feasibility of adding this lane. Field observations suggest that there may be an opportunity to shorten the cycle length, which would reduce time spent by vehicles waiting for the side street green signal. A review of Georgia DOT auxiliary lane standards is provided later in this report, which concludes that a northbound exclusive right turn lane should be constructed on GA 53 at Ahaluna Drive in the existing condition. The addition of the second westbound lane on Ahaluna Drive and the northbound exclusive right turn lane on GA 53 will improve operations, but the Ahaluna Drive approach will still operate at LOS F in the a.m. peak hour due to the long cycle length with the greentime heavily favoring GA 53.
6. **Dawsonville Highway at North Lake Square Access** – This intersection operates well in both peak time periods. In the a.m., the side street approach volumes are extremely low, attributed to most or all of the retail on the side street approaches being closed for business at that time. The side street volumes increase notably in the p.m. Side street approach delays are fairly high, though still within acceptable limits. This is attributed to the allocation of the majority of greentime on the signal to the Dawsonville Highway approaches, resulting in long waits on the side streets, even when volumes are low.
8. **Dawsonville Highway at McEver Road** – This is the major intersection in the area, where the route of GA 53 turns from Dawsonville Highway to McEver Road. The lane configuration and signal phasing at this intersection are generally appropriate. The southbound right turn volume is sufficiently-high (828 a.m., 481 p.m.) to merit consideration of the addition of a second exclusive right turn lane and/or the addition of a protected right turn overlap phase. The overlap phase would provide a protected right turn arrow that would operate concurrently with the westbound left turn protected phase on the McEver Road approach. This would replace the red ball indication for that movement which would increase capacity by not requiring each right turner to stop. However, even with these improvements, the intersection will still operate at LOS F in the p.m. peak hour. Finally, there may be an opportunity to reduce the cycle length and fine-tune the signal timing at this intersection.

9. **Dawsonville Highway at Green Hill Circle** – This signalized intersection generally operates acceptably, but does incur some side-street delays, again, due to the allocation of the majority of greentime to the Dawsonville Highway approaches. There may be an opportunity to reduce the cycle length and fine-tune the signal timing at this intersection.
10. **Dawsonville Highway at Shallowford Road** – The lane configuration and signal phasing are appropriate for this intersection. Reduction of the cycle length and optimization of the allocation of greentime could reduce delays and queuing at this intersection.

## Future No-Build Traffic Conditions

A future no-build condition was developed. This represents the traffic conditions that will exist in the future at the date of the full build-out of the proposed Lanier DRI, but not including the Lanier DRI trips. The purpose of the no-build analysis is to isolate the traffic impacts of the proposed development from other growth and development that is expected to occur in the area while the Lanier DRI is under construction.

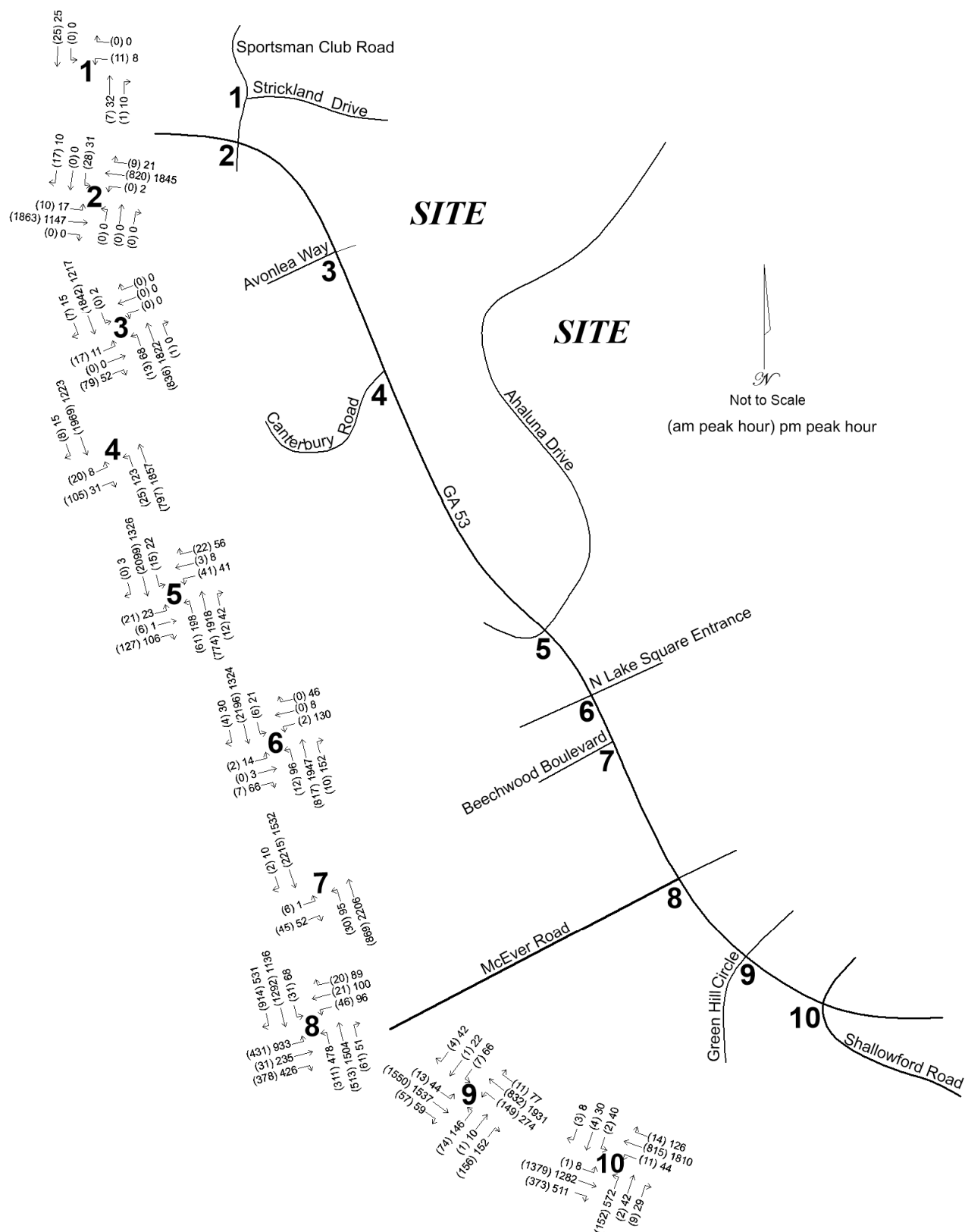
The no-build condition consists of the counted traffic volumes, increased by a general background growth factor. In order to develop the background growth factor, historic Georgia DOT 24-hour traffic counts were collected in the vicinity of the Lanier DRI. These counts were performed from 2011 through 2015 (the latest year for which Georgia DOT data is available) and, according to the Georgia DOT, the counts were adjusted for a variety of factors, including season, in order to arrive at the Average Annual Daily Traffic (AADT) volume. The Georgia DOT AADT counts are summarized in Table 3.

**Table 3 – Georgia DOT Daily Traffic Volume Counts**

| Year              | SR 53<br>N of<br>Sportsman | Annual<br>Growth | McEver<br>W of<br>SR 53 | Annual<br>Growth | Dawsonville<br>S of<br>Shallowford | Annual<br>Growth | Shallowford<br>S of<br>Dawsonville | Annual<br>Growth |
|-------------------|----------------------------|------------------|-------------------------|------------------|------------------------------------|------------------|------------------------------------|------------------|
| <b>Station ID</b> | <b>1390269</b>             |                  | <b>1390274</b>          |                  | <b>1390258</b>                     |                  | <b>1390647</b>                     |                  |
| 2011              | 23,830                     | na               | 21,520                  | na               | 25,950                             | na               | 8,280                              | na               |
| 2012              | 23,520                     | -1.3%            | 21,150                  | -1.7%            | 25,610                             | -1.3%            | 8,140                              | -1.7%            |
| 2013              | 22,730                     | -3.4%            | 20,890                  | -1.2%            | 25,520                             | -0.4%            | 8,090                              | -0.6%            |
| 2014              | 22,700                     | -0.1%            | 20,900                  | 0.0%             | 25,500                             | -0.1%            | 13,300                             | 64.4%            |
| 2015              | 25,600                     | 12.8%            | 21,600                  | 3.3%             | 26,300                             | 3.1%             | 13,700                             | 3.0%             |
| Annual<br>Average |                            | 1.8%             |                         | 0.1%             |                                    | 0.3%             |                                    | 13.4%            |

The annual growth trend has fluctuated from year to year, with generally negative growth during the first few count years, then strong growth in the most recent years. The average annual growth on GA 53 closest to the site has been 1.8%. A modest 2% annual growth factor was applied to the counted volumes when projecting the future no-build volumes. The growth was applied for five years, for a total of 10.4% growth, that will occur while the Lanier Tract DRI is under construction.

The existing, counted traffic volumes were increased by the 10.4% growth factor. The results are the no-build condition traffic volumes that will be on the roadway network in the future when the Lanier Tract DRI is completed, but excluding the Lanier Tract DRI trips. These no-build volumes are shown in Figure 3.



### Figure 3 – Future No-Build Traffic Volumes

## Future No-Build Intersection Operations

No-build traffic operations were analyzed at the counted intersections using Synchro software, version 8, in accordance with the methodology presented in the Transportation Research Board's 2010 *Highway Capacity Manual (HCM 2010)*. The *HCM 2010* methodology is presented in Appendix B. The results of the analysis are shown in Table 4. Computer printouts containing detailed results of the analysis are located in Appendix D.

**Table 4 – Future No-Build Intersection Operations**

| Intersection / Approach                       | A.M. Peak Hour |              | P.M. Peak Hour |                |
|-----------------------------------------------|----------------|--------------|----------------|----------------|
|                                               | LOS            | Delay s/veh  | LOS            | Delay s/veh    |
| 1. Sportsman Club Road at Strickland Drive    | A              | 2.6          | A              | 1.7            |
| southbound left turn                          | A              | 0.0          | A              | 0.0            |
| westbound approach                            | A              | 8.9          | A              | 8.9            |
| 2. Dawsonville Highway at Sportsman Club Road | B              | 11.8         | D              | 34.3           |
| northbound approach (turn lane)               | A              | 0.0          | A              | 0.0            |
| southbound approach (Sportsman Club Road)     | <b>F</b>       | <b>496.6</b> | <b>F</b>       | <b>1,780.7</b> |
| eastbound left turn (GA 53)                   | B              | 10.3         | C              | 17.9           |
| westbound left turn (GA 53)                   | A              | 0.0          | B              | 11.3           |
| 3. Dawsonville Highway at Avonlea Way         | A              | 4.5          | A              | 1.5            |
| northbound left turn (GA 53)                  | C              | 20.4         | B              | 12.2           |
| eastbound left turn                           | <b>F</b>       | <b>552.3</b> | <b>F</b>       | <b>229.1</b>   |
| eastbound right turn                          | D              | 33.7         | B              | 14.7           |
| 4. Dawsonville Highway at Canterbury Road     | A              | 6.7          | A              | 1.7            |
| northbound left turn (GA 53)                  | C              | 21.7         | B              | 13.7           |
| eastbound left turn                           | <b>F</b>       | <b>715.5</b> | <b>F</b>       | <b>349.9</b>   |
| eastbound right turn                          | E              | 41.5         | B              | 14.4           |
| 5. Dawsonville Highway at Ahaluna Drive       | C              | 22.3         | B              | 15.5           |
| northbound approach (GA 53)                   | A              | 5.6          | B              | 11.5           |
| southbound approach (GA 53)                   | C              | 22.7         | B              | 14.0           |
| eastbound approach                            | E              | 58.3         | C              | 23.8           |
| westbound approach                            | <b>F</b>       | <b>139.1</b> | <b>F</b>       | <b>96.6</b>    |
| 6. Dawsonville Highway at North Lake Square   | A              | 3.2          | B              | 16.6           |
| northbound approach (GA 53)                   | A              | 1.0          | B              | 14.8           |
| southbound approach (GA 53)                   | A              | 3.9          | B              | 10.7           |
| eastbound approach                            | E              | 69.5         | C              | 21.8           |
| westbound approach                            | E              | 70.0         | E              | 68.1           |
| 7. Dawsonville Highway at Beachwood Boulevard | A              | 2.6          | A              | 0.9            |
| northbound left turn (GA 53)                  | D              | 28.6         | C              | 15.8           |
| eastbound left turn                           | <b>F</b>       | <b>866.6</b> | <b>F</b>       | <b>375.6</b>   |
| eastbound right turn                          | E              | 36.2         | C              | 18.4           |
| 8. Dawsonville Highway at McEver Road         | D              | 45.7         | <b>F</b>       | <b>127.3</b>   |
| northbound approach (GA 53)                   | E              | 67.7         | <b>F</b>       | <b>135.0</b>   |

|                                             |          |             |          |              |
|---------------------------------------------|----------|-------------|----------|--------------|
| southbound approach (GA 53)                 | C        | 20.0        | E        | 57.9         |
| eastbound approach                          | <b>F</b> | <b>92.6</b> | <b>F</b> | <b>208.0</b> |
| westbound approach                          | E        | 61.8        | E        | 70.6         |
| 9. Dawsonville Highway at Green Hill Circle | B        | 14.2        | E        | 65.1         |
| northbound approach (GA 53)                 | A        | 8.2         | E        | 70.6         |
| southbound approach (GA 53)                 | B        | 13.5        | D        | 54.3         |
| eastbound approach                          | D        | 44.0        | E        | 58.1         |
| westbound approach                          | D        | 38.8        | <b>F</b> | <b>112.9</b> |
| 10. Dawsonville Highway at Shallowford Road | B        | 12.5        | E        | 73.1         |
| northbound approach (GA 53)                 | A        | 6.0         | E        | 72.0         |
| southbound approach (GA 53)                 | A        | 9.1         | E        | 57.5         |
| eastbound approach                          | E        | 76.3        | <b>F</b> | <b>119.5</b> |
| westbound approach                          | D        | 49.9        | E        | 77.7         |

The analysis of the no-build condition reveals increases in delays at each of the study intersections, as would be expected. The no-build analysis did not include any of the potential mitigation discussed in the existing analysis. The no-build condition at each intersection is discussed briefly as follows:

- 1. Sportsman Club Road at Strickland Drive** – Operations at this intersection will continue to be excellent in the no-build condition. Therefore, no changes are recommended at this intersection for the no-build condition.
- 2. Dawsonville Highway at Sportsman Club Road** – The side street delays will become very high in the no-build condition. However, the volumes incurring these delays will remain modest and it is considered unlikely that this intersection would be a good candidate for signalization.
- 3. Dawsonville Highway at Avonlea Way, 4. Dawsonville Highway at Canterbury Road, and 7. Dawsonville Highway at Beachwood Boulevard** – The no-build operations at these three unsignalized intersections will be comparable to the existing condition, with the GA 53 approaches operating well, moderate delays for the side street right turn movements, and high delays for the side street left turn movements. As with the existing condition, at all three of these intersections, the side street volumes are predominately right turners, with extremely low left turn volumes. For this reason, these three intersections are expected to be unlikely candidates for signalization in the no-build condition.
- 5. Dawsonville Highway at Ahaluna Drive** – The Ahaluna Drive approach will continue to operate at LOS F and the delays will increase. The mitigation discussed in the existing condition is still applicable.
- 6. Dawsonville Highway at North Lake Square Access** – This intersection will operate comparably in the no-build condition, as in the existing condition. No mitigation is identified for this intersection in the no-build condition.
- 8. Dawsonville Highway at McEver Road** – Operations will continue to be congested at this intersection. The mitigation discussed in the existing condition is still applicable.



9. **Dawsonville Highway at Green Hill Circle** – Delays will increase from the existing to no-build conditions. A.M. peak operations will continue to be acceptable, while the p.m. peak will teeter between LOS E and LOS F. No new mitigation is identified for the no-build condition.
10. **Dawsonville Highway at Shallowford Road** – As with the other intersections, no new mitigation is identified for the no-build condition. Delays will increase from the existing condition, but will generally remain acceptable in the a.m. and at the LOS E to LOS F threshold in the p.m.

## Lanier Tract Traffic Characteristics

This section describes the anticipated traffic characteristics of the proposed Lanier Tract development, including a site description, how much traffic the project will generate, and where that traffic will travel.

### Project Description

The Lanier Tract DRI is a primarily senior-age-restricted residential community that will be developed generally along Ahaluna Drive and Strickland Drive. There will be an office/retail node along GA 53, north of Avonlea Way. A fire station of 10,650 square feet is also proposed to be constructed along GA 53 in conjunction with this development. Vehicular access will be provided at several locations, primarily along Ahaluna Drive, with connections to GA 53 via Strickland Drive, at the median opening at Avonlea Way, and through adjacent outparcels (which will be discussed in the Future Phase Two section of this report), aligning with Canterbury Road. The office/retail node will have a two right-in / right-out accesses directly on GA 53, with no anticipated internal connection to the balance of the development. The site plan is presented in Figure 4.

### Trip Generation

The volume of traffic that will be generated by the proposed Lanier Tract DRI was calculated using the equations and rates in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 9<sup>th</sup> Edition. The trip generation for all of the detached homes was calculated using ITE Land Use 251 – Senior Adult Housing – Detached. The trips for the independent living units were calculated using ITE Land Use 253 – Congregate Care Facility. The trips for the assisted living facility were determined using ITE Land Use – 254 – Assisted Living. The storage facility trips were calculated using ITE Land Use 151 – Mini-Warehouse. The office / retail trip generation was calculated by dividing the total square footage of that commercial node in half and applying ITE Land Use 820 – Shopping Center to half of the square footage and ITE Land Use 750 – Office Park to the other half.

No multi-use adjustment was applied to the raw trip generation to account for the mixed-use nature of the project, because the office/retail node is not connected internally with the balance of the project. The retail trip generation was adjusted to account for pass-by trips. Pass-by trips are trips to the retail that are currently driving on GA 53 and which will turn into the site for shopping purposes then continue on the trip they are already making. The ITE *Trip Generation Manual* provides an average p.m. peak hour pass-by percentage of 38% for the shopping center land use. However, the plan for this development, with the retail mixed with office, suggests that this retail may be highly destination-oriented. To be conservative, a 25% pass-by adjustment was made for the p.m. peak hour trips, while a 15% adjustment was applied to the a.m. peak hour and 24-hour volumes.

The fire station will be located on the GA 53 adjacent to the project and will serve not just this project, but also the surrounding community. The trips that will be generated by the fire station are expected to be very low. Therefore, the trip generation of the fire station was excluded from this calculation.

The trip generation calculations are shown in Table 5.

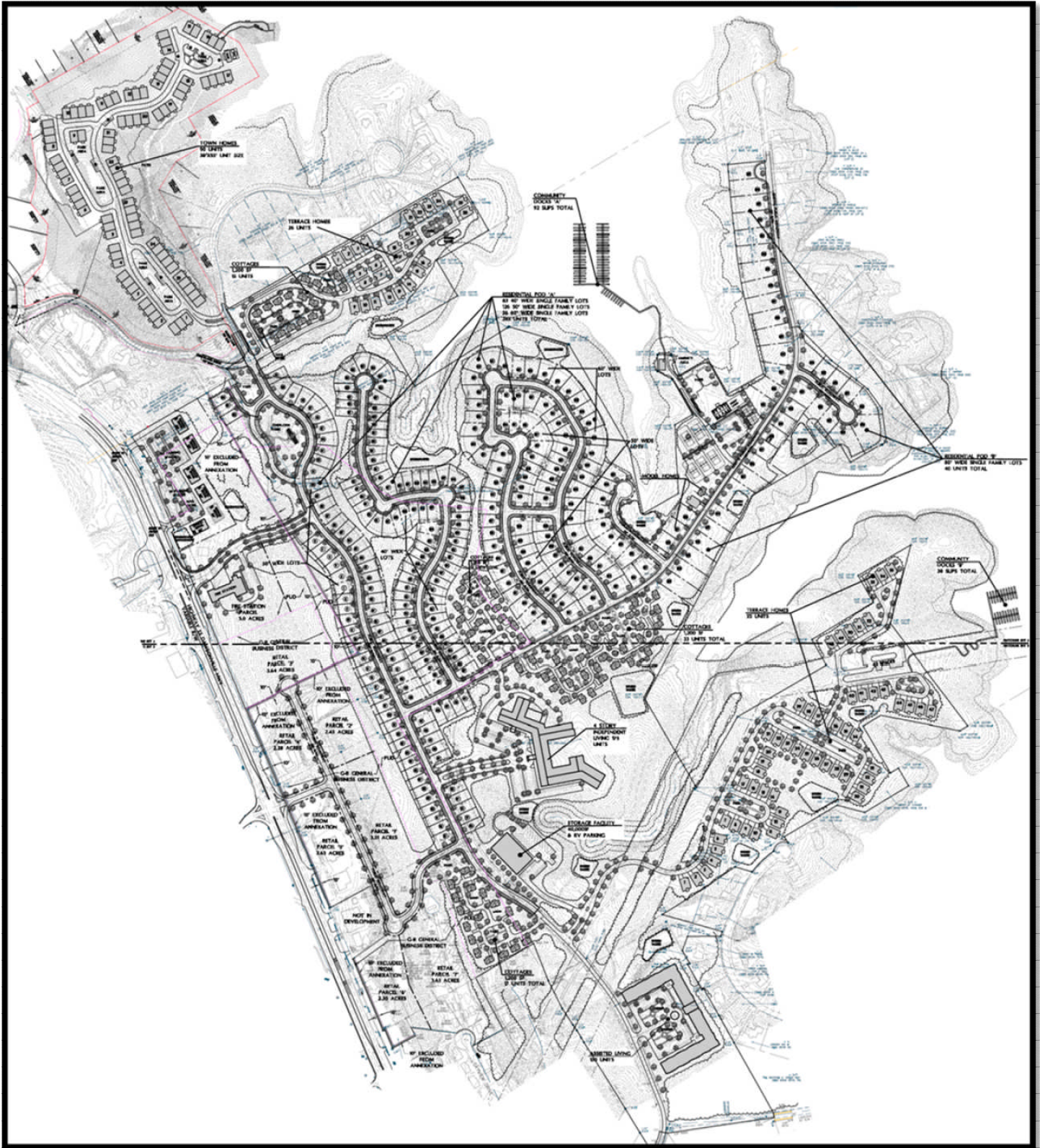


Figure 4 – Lanier Tract Site Plan

**Table 5 – Lanier Tract Trip Generation**

| Land Use                               | ITE Code | Size                   | A.M. Peak Hour |           |           | P.M. Peak Hour |           |            | 24-Hour    |
|----------------------------------------|----------|------------------------|----------------|-----------|-----------|----------------|-----------|------------|------------|
|                                        |          |                        | In             | Out       | Total     | In             | Out       | Total      | 2-Way      |
| Terrace Homes Detached (at Strickland) | 251      | 26 homes               | 2              | 4         | 6         | 4              | 3         | 7          | 96         |
| Cottages Detached (at Strickland)      | 251      | 15 homes               | 1              | 2         | 3         | 2              | 2         | 4          | 56         |
| Pod A Single Family Detached           | 251      | 265 homes              | 20             | 38        | 58        | 44             | 28        | 72         | 976        |
| Pod B Single Family Detached           | 251      | 40 homes               | 3              | 6         | 9         | 6              | 5         | 11         | 147        |
| Cottages Detached                      | 251      | 64 homes               | 5              | 9         | 14        | 11             | 6         | 17         | 236        |
| Terrace Homes Detached                 | 251      | 55 homes               | 4              | 8         | 12        | 9              | 6         | 15         | 202        |
| Independent Living                     | 253      | 175 units              | 6              | 5         | 11        | 16             | 14        | 30         | 354        |
| Assisted Living                        | 254      | <u>150 beds</u>        | <u>14</u>      | <u>7</u>  | <u>21</u> | <u>15</u>      | <u>18</u> | <u>33</u>  | <u>356</u> |
| Total Residential New Trips            |          | 790 units              | 55             | 79        | 134       | 107            | 82        | 189        | 2,423      |
|                                        |          |                        |                |           |           |                |           |            |            |
| Storage                                | 151      | 40,000 ft <sup>2</sup> | 3              | 3         | 6         | 5              | 5         | 10         | 100        |
|                                        |          |                        |                |           |           |                |           |            |            |
| Office                                 | 750      | 12,000 ft <sup>2</sup> | 18             | 3         | 21        | 2              | 16        | 18         | 138        |
| Retail Total Trips                     | 820      | 12,000 ft <sup>2</sup> | 7              | 5         | 12        | 21             | 24        | 45         | 512        |
| -pass-by                               |          | 15/25/15%              | <u>-1</u>      | <u>-1</u> | <u>-2</u> | <u>-5</u>      | <u>-6</u> | <u>-11</u> | <u>-76</u> |
| Retail New Trips                       |          |                        | <u>6</u>       | <u>4</u>  | <u>10</u> | <u>16</u>      | <u>18</u> | <u>34</u>  | <u>436</u> |
| Total Commercial New Trips             |          |                        | 24             | 7         | 31        | 18             | 34        | 52         | 574        |
|                                        |          |                        |                |           |           |                |           |            |            |
| Total Project New Trips                |          |                        | 82             | 89        | 171       | 130            | 121       | 251        | 3,097      |

Notes: The detached homes trip calculations employed ITE average rates due to numbers of units generally much smaller than average sizes in the ITE data. The office and retail calculations were based on ITE average rates due to square footages much smaller than average sizes in the ITE data.

### Willow Springs Townhomes

A small development of 90 senior-age-restricted townhomes is anticipated to be developed concurrently with the Lanier Tract DRI, along Karen Lane (shown in the site plan in Figure 4 at the northern end of the site, bordered in red). The trips for this development were calculated using ITE Land Use 252 – Senior Adult Housing – Attached. The Willow Springs trips are shown in Table 6.

**Table 6 – Willow Springs Townhomes Trip Generation**

| Land Use                        | ITE Code | Size | A.M. Peak Hour |     |       | P.M. Peak Hour |     |       | 24-Hour |
|---------------------------------|----------|------|----------------|-----|-------|----------------|-----|-------|---------|
|                                 |          |      | In             | Out | Total | In             | Out | Total | 2-Way   |
| Senior Adult Housing - Attached | 252      | 90   | 6              | 12  | 18    | 12             | 11  | 23    | 290     |

## Trip Distribution and Assignment

The trip distribution percentages indicate what proportion of the project's trips will travel to and from various directions. The new trips were distributed based on the locations and proximity of likely trip origins and destinations for each land use. The residential trips, including the Willow Springs Townhomes, were distributed based on the locations of urban centers and retail nodes, while the office and retail trips were distributed based on population densities. The new project trips, shown in Table 5, were assigned to the roadway network based on these distribution percentages. Pass-by trips were assigned, where appropriate, based on existing traffic flows passing the site. The new trip distribution percentages for each land use, and the total peak hour trips expected to be generated by the site, are shown in Figure 5. The Willow Springs trips, shown in Table 6, were distributed to the study intersections using the same distribution as the Lanier Tract residential trips. These trips are not included in the site generated trips shown in Figure 5, but they are included in the future analysis. Appendix A contains intersection volume worksheets that show the specific Willow Springs trips (as well as all other Lanier Tract residential, office, and retail trips) for each movement at each intersection.



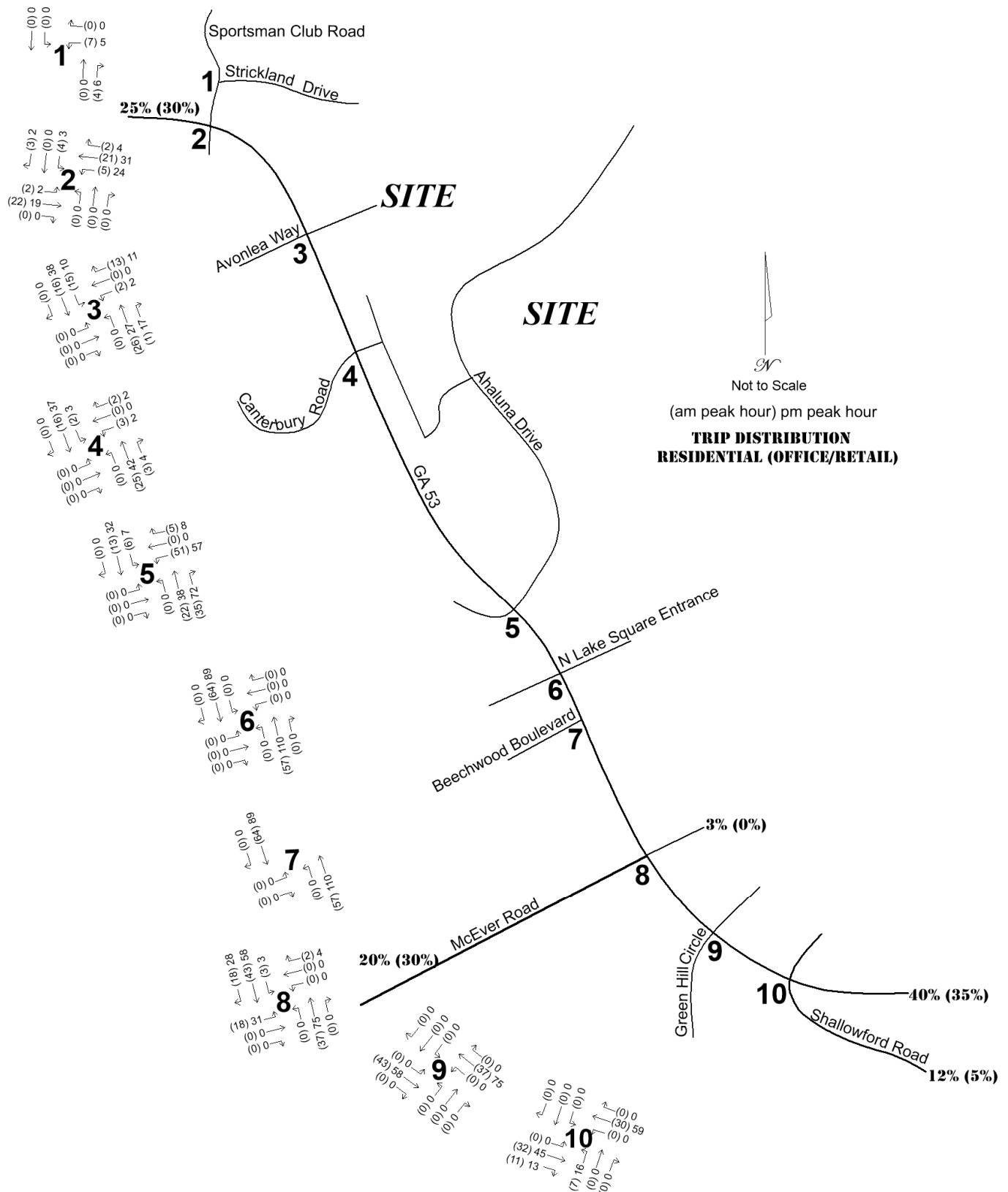


Figure 5 – New Trip Distribution Percentages and Total Lanier Tract Trips

## Future Phase One Traffic Conditions

This section describes the anticipated future traffic conditions after the Lanier Tract DRI is fully constructed and operational.

### Future Phase One Traffic Volumes

The trips from the Lanier Tract DRI (and Willow Springs) were added to the future no-build volumes (comprised of the counted volumes increased by 10.4%, as described previously). The resulting volumes are the traffic volumes that will be at each intersection when the Lanier Tract is fully operational. A strip of land between the Lanier Tract and the east side of GA 53 is anticipated to be developed by others with retail outparcels at some future date. The impact of this outparcel development is evaluated in the Future Phase Two analysis, discussed later in this report. However, as part of the Lanier Tract development, a roadway will be constructed through that strip of land, to connect the Lanier Tract to GA 53 at the existing median break at Canterbury Road. The Future Phase One volumes and analysis include this connection. The Future Phase One traffic volume projections are shown in Figure 6. These volumes are also shown in the intersection volume worksheets in Appendix A.



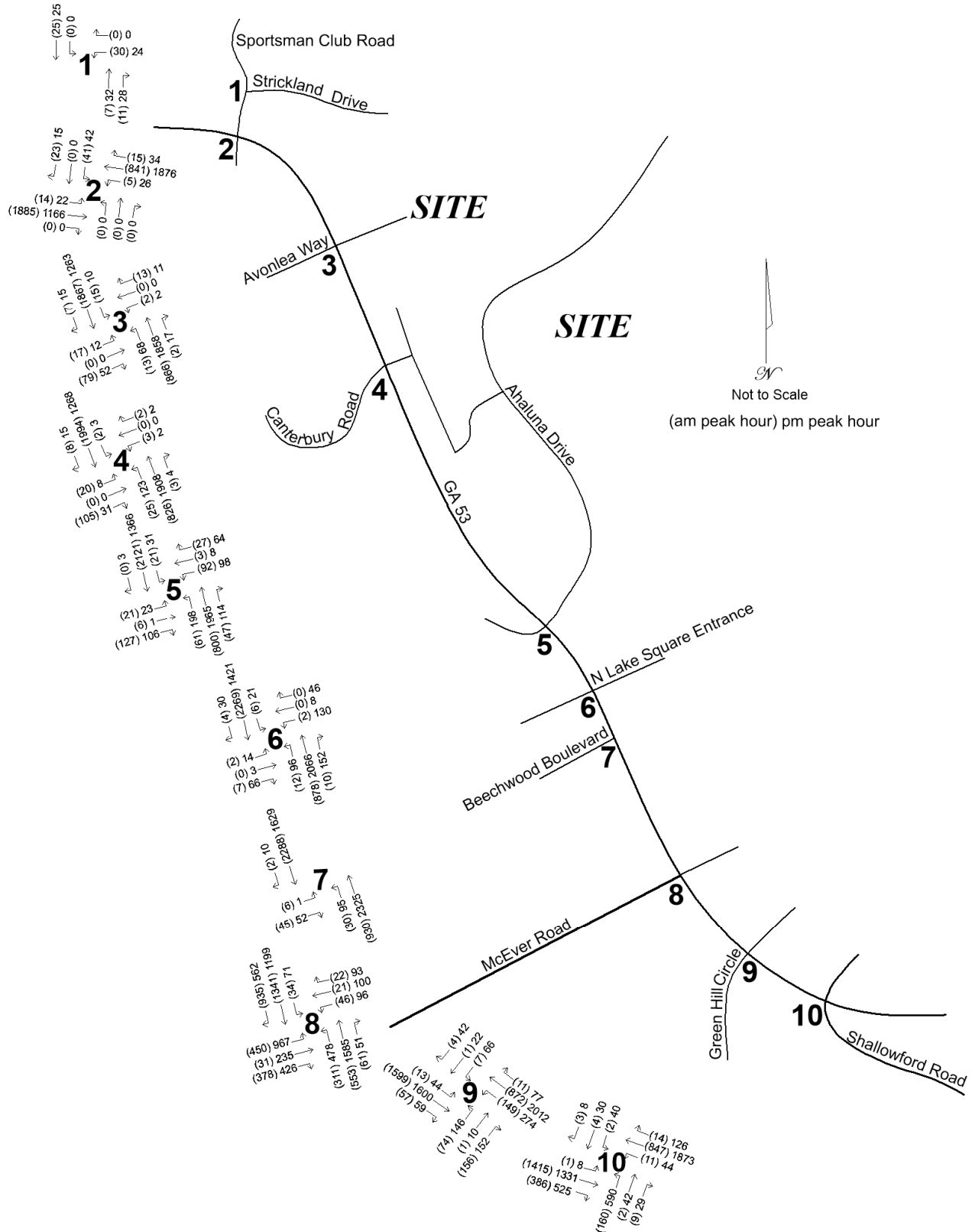


Figure 6 – Future Phase One Peak Hour Traffic Volume Projections

## Future Phase One Intersection Operations

An operational analysis was performed for the Future Phase One conditions. Table 7 presents the results of this analysis. Computer printouts containing detailed results of the analysis are located in Appendix E.

**Table 7 – Future Phase One Intersection Operations**

| Intersection / Approach                       | A.M. Peak Hour |                | P.M. Peak Hour |                |
|-----------------------------------------------|----------------|----------------|----------------|----------------|
|                                               | LOS            | Delay s/veh    | LOS            | Delay s/veh    |
| 1. Sportsman Club Road at Strickland Drive    | A              | 4.2            | A              | 3.2            |
| southbound left turn                          | A              | 0.0            | A              | 0.0            |
| westbound approach                            | A              | 9.1            | A              | 9.2            |
| 2. Dawsonville Highway at Sportsman Club Road | C              | 23.0           | <b>F</b>       | <b>74.4</b>    |
| northbound approach (turn lane)               | A              | 0.0            | A              | 0.0            |
| southbound approach (Sportsman Club Road)     | <b>F</b>       | <b>834.4</b>   | <b>F</b>       | <b>2,872.3</b> |
| eastbound left turn (GA 53)                   | B              | 10.4           | C              | 18.7           |
| westbound left turn (GA 53)                   | C              | 20.5           | B              | 11.7           |
| 3. Dawsonville Highway at Avonlea Way         | A              | 9.8            | A              | 4.2            |
| northbound left turn (GA 53)                  | C              | 20.8           | B              | 12.6           |
| southbound left turn                          | B              | 10.3           | C              | 17.9           |
| eastbound left turn                           | <b>F</b>       | <b>1,381.4</b> | <b>F</b>       | <b>653.3</b>   |
| eastbound right turn                          | D              | 34.9           | C              | 15.1           |
| westbound left turn                           | <b>F</b>       | <b>288.1</b>   | <b>F</b>       | <b>696.5</b>   |
| westbound right turn                          | B              | 12.1           | C              | 20.5           |
| 4. Dawsonville Highway at Canterbury Road     | B              | 12.4           | A              | 3.8            |
| northbound left turn (GA 53)                  | C              | 22.2           | B              | 14.2           |
| southbound left turn                          | B              | 10.1           | C              | 17.8           |
| eastbound left turn                           | <b>F</b>       | <b>1,504.7</b> | <b>F</b>       | <b>767.5</b>   |
| eastbound right turn                          | E              | 43.3           | B              | 14.8           |
| westbound left turn                           | <b>F</b>       | <b>436.1</b>   | <b>F</b>       | <b>1,069.5</b> |
| westbound right turn                          | B              | 11.8           | C              | 20.0           |
| 5. Dawsonville Highway at Ahaluna Drive       | C              | 31.7           | C              | 21.4           |
| northbound approach (GA 53)                   | A              | 6.8            | B              | 15.7           |
| southbound approach (GA 53)                   | D              | 35.3           | C              | 20.4           |
| eastbound approach                            | D              | 46.8           | B              | 17.5           |
| westbound approach                            | <b>F</b>       | <b>134.1</b>   | <b>F</b>       | <b>104.1</b>   |
| 6. Dawsonville Highway at North Lake Square   | A              | 3.9            | B              | 17.4           |
| northbound approach (GA 53)                   | A              | 1.1            | B              | 15.9           |
| southbound approach (GA 53)                   | A              | 4.9            | B              | 11.8           |
| eastbound approach                            | E              | 69.5           | C              | 21.8           |
| westbound approach                            | E              | 70.0           | E              | 68.1           |
| 7. Dawsonville Highway at Beachwood Boulevard | A              | 3.3            | A              | 0.9            |
| northbound left turn (GA 53)                  | D              | 30.7           | C              | 17.1           |
| eastbound left turn                           | <b>F</b>       | <b>1,230.3</b> | <b>F</b>       | <b>534.2</b>   |

|                                             |          |              |          |              |
|---------------------------------------------|----------|--------------|----------|--------------|
| eastbound right turn                        | E        | 39.4         | C        | 19.8         |
| 8. Dawsonville Highway at McEver Road       | D        | 50.9         | <b>F</b> | <b>142.6</b> |
| northbound approach (GA 53)                 | E        | 77.0         | <b>F</b> | <b>161.1</b> |
| southbound approach (GA 53)                 | C        | 21.9         | E        | 59.3         |
| eastbound approach                          | <b>F</b> | <b>104.0</b> | <b>F</b> | <b>230.3</b> |
| westbound approach                          | E        | 60.9         | E        | 74.4         |
| 9. Dawsonville Highway at Green Hill Circle | B        | 14.9         | E        | 67.3         |
| northbound approach (GA 53)                 | A        | 8.6          | E        | 72.6         |
| southbound approach (GA 53)                 | B        | 14.3         | E        | 56.9         |
| eastbound approach                          | D        | 47.1         | E        | 59.7         |
| westbound approach                          | D        | 38.8         | <b>F</b> | <b>119.2</b> |
| 10. Dawsonville Highway at Shallowford Road | B        | 13.3         | E        | 78.6         |
| northbound approach (GA 53)                 | A        | 6.2          | E        | 73.6         |
| southbound approach (GA 53)                 | B        | 10.1         | E        | 66.1         |
| eastbound approach                          | E        | 76.5         | <b>F</b> | <b>128.7</b> |
| westbound approach                          | D        | 49.9         | E        | 77.7         |

A note is made here about the high delays accompanying some of the LOS F. As delays increase, the model's average delay per vehicle projections exceed model capabilities and the results become unrealistic. For example, it is highly improbable that the eastbound left turn from Canterbury Road will incur an average delay of 1,504.7 seconds, or 25 minutes, per vehicle. These high delay numbers are reported to provide an indication of the severity of the LOS F, and were reviewed with engineering judgment when developing conclusions and recommendations.

The operational analysis of Future Phase One conditions reveals some increases in delays from the no-build condition. The most notable changes are increases in the side street delays at both unsignalized and signalized intersections. The Lanier Tract DRI generally contributes a small proportion to the increases in volumes between the existing condition and the Future Phase One, while the background growth contributes a significant proportion of the increases. At most intersections, aside from the site access points along GA 53, the Lanier Tract DRI will contribute primarily to the major roadway through movements. The project's most significant impact will occur at four locations – Sportsman Club Road at GA 53, Avonlea Way at GA 53, Canterbury Road at GA 53, and Ahaluna Drive at GA 53, with the greatest impact being at Ahaluna Drive. The Future Phase One condition at each intersection is discussed briefly as follows:

1. **Sportsman Club Road at Strickland Drive** – Operations at this intersection are will continue to be excellent in the no-build condition. Therefore, no changes are recommended at this intersection for the Future Phase One condition.
2. **Dawsonville Highway at Sportsman Club Road** – The side street delays will continue to be very high in the future. However, the volumes incurring these delays will remain modest and it is considered unlikely that this intersection would be a good candidate for signalization, even in the Future Phase One condition.

3. **Dawsonville Highway at Avonlea Way** – The Lanier Tract DRI will replace the existing private driveway at this location, with a main access to the project. The alignment with the median break will allow full movement operations at this site access. However, it is anticipated that volumes using this access will be modest for a few reasons. First, most of the site trips will be oriented to and from the south on GA 53. Therefore, the propensity of most trips will be to travel along Ahaluna Drive to the signal at GA 53, rather than to turn in and out of the unsignalized access across from Avonlea Way. Some trips traveling to and from the north will use this access and some will use the connection through the site to Strickland Drive. For these reasons, the volumes exiting the site at this location will be low, and will include more right turners than left turners. On the existing eastbound approach of Avonlea Way, the right turn volumes are also notably higher than the left turners. This is an indication that this intersection is unlikely to meet warrants for signalization in the future. No signal warrant analysis was performed at this intersection as part of this study. A right turn lane analysis (presented later) was performed for the northbound direction of GA 53 at the site access at Avonlea Way. The analysis indicates that it is likely that a right turn lane will be justified at this location in the Future Phase One condition and the site plan includes this lane.
4. **Dawsonville Highway at Canterbury Road** – As with the Avonlea intersection, the volumes entering and exiting the Lanier Tract at Canterbury will be very low. The circuitous road configuration through the adjacent future retail tracts will further discourage use of this access. Therefore, for Future Phase One, this intersection is considered unlikely to meet signal warrants. No signal warrant analysis was performed at this intersection as part of this study. A right turn lane analysis (presented later) was performed for the northbound direction of GA 53 at the site access at Canterbury Road. The analysis indicates that it is *not* likely that a right turn lane will be justified at this location in the Future Phase One condition.
5. **Dawsonville Highway at Ahaluna Drive** – The Ahaluna Drive approach will continue to operate at LOS F and the delays will increase. The mitigation discussed in the existing condition is still applicable, including the addition of a northbound right turn lane on GA 53 and a second westbound lane on Ahaluna Drive.
6. **Dawsonville Highway at North Lake Square Access** – This intersection will operate comparably in the future as in the existing and no-build conditions. No mitigation is identified for this intersection in the Future Phase One condition.
7. **Dawsonville Highway at Beachwood Boulevard** – The operations at this unsignalized intersections will continue comparable to the existing and no-build conditions, with the GA 53 approaches operating well, moderate delays for the side street right turn movement, and high delays for the side street left turn movement. The side street volumes will continue to be predominately right turners, with extremely low left turn volumes. For this reason, this intersection is considered unlikely to meet warrants for signalization in the future.
8. **Dawsonville Highway at McEver Road** – Operations will continue to be congested at this intersection, with the overall intersection operating at LOS F in the p.m., and several approaches operating at LOS F in the a.m. and/or p.m. The mitigation discussed in the existing condition is still applicable. This intersection is built-out and the mitigation discussed in the existing analysis includes the addition of a second

southbound right turn lane. Short of widening GA 53 with additional through lanes, or reducing volumes at this intersection, there are not many additional options to mitigate the high delays.

9. **Dawsonville Highway at Green Hill Circle** – Delays will increase from the no-build condition to the future. A.M. peak operations will continue to be acceptable, while the p.m. peak will teeter between LOS E and LOS F. No new mitigation is identified for the Future Phase One condition.
10. **Dawsonville Highway at Shallowford Road** – Delays will increase from the no-build condition, but will generally remain acceptable in the a.m. and at the LOS E to LOS F threshold in the p.m. No new mitigation is identified for the Future Phase One condition.

## Future Phase Two Traffic Conditions

A strip of land along the east side of GA 53, west of the Lanier Tract, is anticipated to be developed by others at some future date. A Future Phase Two condition was developed to assess the traffic operations after this land is developed.

The land is anticipated to be developed as seven outparcels, with 8,000 square feet of retail shopping on each, for a total of 56,000 square feet of retail shopping. The trip generation of the outparcels is presented in Table 8.

**Table 8 – Outparcel Trip Generation**

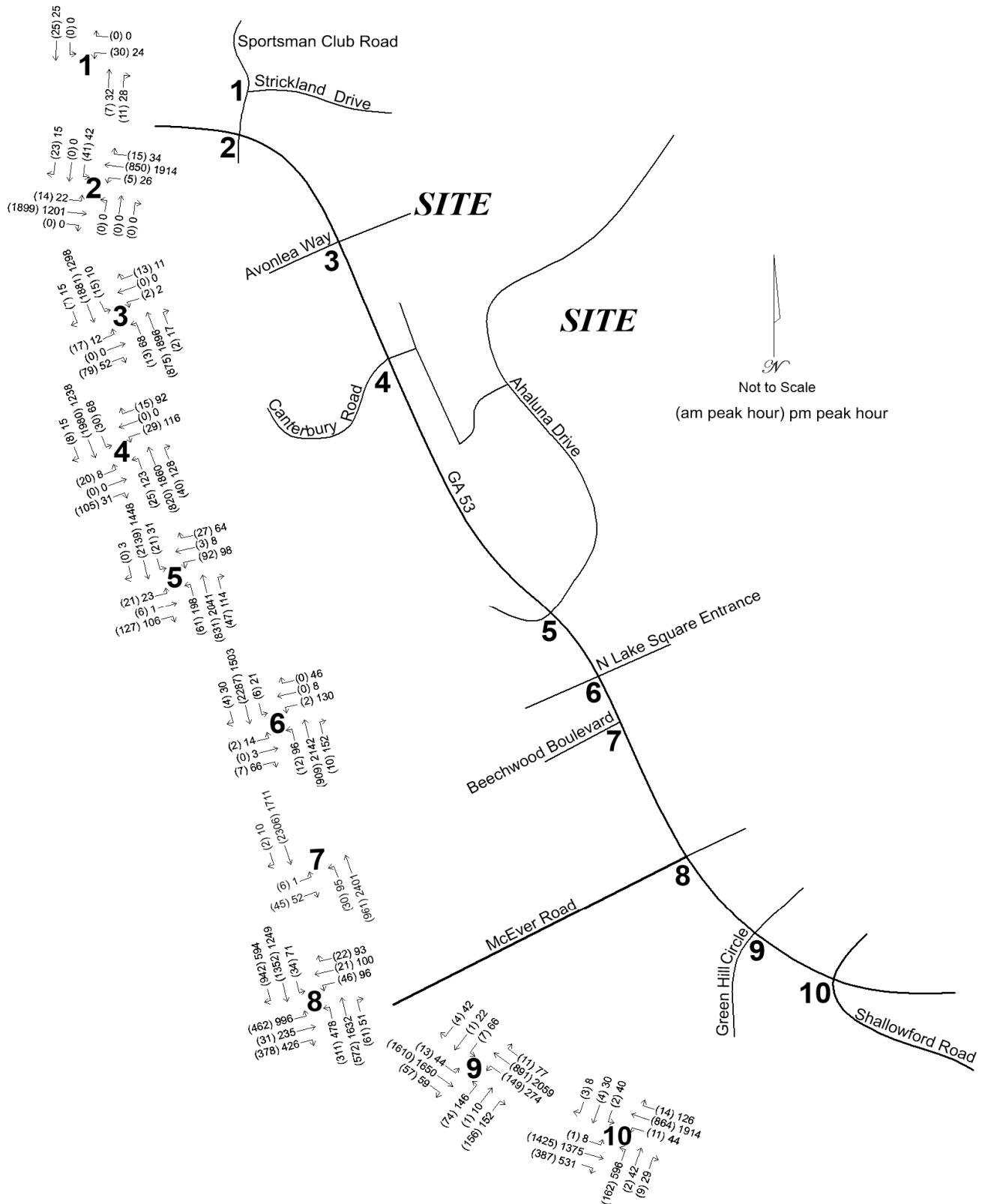
| Land Use              | ITE Code | Size                   | A.M. Peak Hour |            |            | P.M. Peak Hour |            |             | 24-Hour       |
|-----------------------|----------|------------------------|----------------|------------|------------|----------------|------------|-------------|---------------|
|                       |          |                        | In             | Out        | Total      | In             | Out        | Total       | 2-Way         |
| Outparcel Total Trips | 820      | 56,000 ft <sup>2</sup> | 68             | 41         | 109        | 195            | 211        | 406         | 4,658         |
| -pass-by              |          | 30/40/30%              | <u>-20</u>     | <u>-12</u> | <u>-32</u> | <u>-78</u>     | <u>-84</u> | <u>-162</u> | <u>-1,398</u> |
| Outparcel New Trips   |          |                        | 48             | 29         | 77         | 117            | 127        | 244         | 3,260         |

The outparcels will be served by a full movement access that will align with the existing median break on GA 53 at Canterbury Road. A connecting roadway will run through the outparcel property and connect to the main roadway through the western portion of the Lanier Tract (connecting Strickland Drive to Ahaluna Drive). The connecting roadway through the outparcel property was assumed to be constructed during the development of the Lanier Tract, and was included in the Future Phase One analysis, as discussed previously. This will allow trips from the proposed Lanier Tract to access GA 53.

The trips that will be generated by the outparcels were distributed to the study intersections using the same trip distribution percentages developed for the retail portion of the Lanier Tract DRI (with one minor difference – five percent of the outparcel trips were distributed back into the Lanier Tract, in anticipation of the trips that will travel between the outparcels and the Lanier Tract DRI. This five percent was subtracted from the south, to and from McEver Road). The Lanier Tract distribution percentages were shown previously in this report, in Figure 5.

## Future Phase Two Traffic Volumes

The trips from the outparcels were added to the Future Phase One volumes (comprised of the counted volumes increased by 10.4%, plus the Lanier Tract and Willow Springs trips, as described previously). The resulting volumes are the traffic volumes that will be at each intersection when the outparcels are developed and operational. The Future Phase Two traffic volume projections are shown in Figure 7. These volumes are also shown in the intersection volume worksheets in Appendix A.





## Future Phase Two Intersection Operations

An operational analysis was performed for the Future Phase Two conditions. Table 9 presents the results of this analysis. Computer printouts containing detailed results of the analysis are located in Appendix E.

**Table 9 – Future Phase Two Intersection Operations**

| Intersection / Approach                       | A.M. Peak Hour |                | P.M. Peak Hour |                 |
|-----------------------------------------------|----------------|----------------|----------------|-----------------|
|                                               | LOS            | Delay s/veh    | LOS            | Delay s/veh     |
| 1. Sportsman Club Road at Strickland Drive    | A              | 4.2            | A              | 3.2             |
| southbound left turn                          | A              | 0.0            | A              | 0.0             |
| westbound approach                            | A              | 9.1            | A              | 9.2             |
| 2. Dawsonville Highway at Sportsman Club Road | C              | 23.7           | <b>F</b>       | <b>74.3</b>     |
| northbound approach (turn lane)               | A              | 0.0            | A              | 0.0             |
| southbound approach (Sportsman Club Road)     | <b>F</b>       | <b>866.3</b>   | <b>F</b>       | <b>3,330.7</b>  |
| eastbound left turn (GA 53)                   | B              | 10.5           | C              | 19.2            |
| westbound left turn (GA 53)                   | C              | 20.8           | B              | 11.9            |
| 3. Dawsonville Highway at Avonlea Way         | B              | 11.1           | A              | 4.5             |
| northbound left turn (GA 53)                  | C              | 21.1           | B              | 12.8            |
| southbound left turn                          | B              | 10.4           | C              | 18.4            |
| eastbound left turn                           | <b>F</b>       | <b>1,593.4</b> | <b>F</b>       | <b>722.2</b>    |
| eastbound right turn                          | E              | 35.6           | C              | 15.5            |
| westbound left turn                           | <b>F</b>       | <b>311.5</b>   | <b>F</b>       | <b>833.9</b>    |
| westbound right turn                          | B              | 12.2           | C              | 21.0            |
| 4. Dawsonville Highway at Canterbury Road     | D              | 29.0           | <b>F</b>       | <b>852.3</b>    |
| northbound left turn (GA 53)                  | C              | 22.0           | B              | 13.9            |
| southbound left turn                          | B              | 10.5           | C              | 20.7            |
| eastbound left turn                           | <b>F</b>       | <b>1,733.4</b> | <b>F</b>       | <b>2,303.8</b>  |
| eastbound right turn                          | E              | 42.2           | B              | 14.6            |
| westbound left turn                           | <b>F</b>       | <b>1712.5</b>  | <b>F</b>       | <b>19,977.6</b> |
| westbound right turn                          | B              | 12.2           | D              | 33.7            |
| 5. Dawsonville Highway at Ahaluna Drive       | C              | 32.6           | C              | 22.8            |
| northbound approach (GA 53)                   | A              | 6.8            | B              | 17.0            |
| southbound approach (GA 53)                   | D              | 37.1           | C              | 22.3            |
| eastbound approach                            | D              | 46.8           | B              | 17.7            |
| westbound approach                            | <b>F</b>       | <b>134.1</b>   | <b>F</b>       | <b>106.1</b>    |
| 6. Dawsonville Highway at North Lake Square   | A              | 4.0            | B              | 18.2            |
| northbound approach (GA 53)                   | A              | 1.2            | B              | 16.7            |
| southbound approach (GA 53)                   | A              | 5.1            | B              | 13.1            |
| eastbound approach                            | E              | 69.5           | C              | 21.8            |
| westbound approach                            | E              | 70.0           | E              | 68.1            |
| 7. Dawsonville Highway at Beachwood Boulevard | A              | 3.3            | A              | 1.0             |
| northbound left turn (GA 53)                  | D              | 31.5           | C              | 18.4            |
| eastbound left turn                           | <b>F</b>       | <b>1,230.3</b> | <b>F</b>       | <b>620.4</b>    |

|                                             |          |              |          |              |
|---------------------------------------------|----------|--------------|----------|--------------|
| eastbound right turn                        | E        | 40.4         | C        | 21.0         |
| 8. Dawsonville Highway at McEver Road       | D        | 52.3         | <b>F</b> | <b>154.3</b> |
| northbound approach (GA 53)                 | E        | 75.8         | <b>F</b> | <b>163.8</b> |
| southbound approach (GA 53)                 | C        | 22.2         | E        | 60.3         |
| eastbound approach                          | <b>F</b> | <b>111.2</b> | <b>F</b> | <b>270.3</b> |
| westbound approach                          | E        | 60.9         | E        | 78.5         |
| 9. Dawsonville Highway at Green Hill Circle | B        | 15.0         | E        | 68.5         |
| northbound approach (GA 53)                 | A        | 8.7          | E        | 73.0         |
| southbound approach (GA 53)                 | B        | 14.4         | E        | 59.3         |
| eastbound approach                          | D        | 47.4         | E        | 59.8         |
| westbound approach                          | D        | 38.8         | <b>F</b> | <b>119.2</b> |
| 10. Dawsonville Highway at Shallowford Road | B        | 13.5         | <b>F</b> | <b>83.2</b>  |
| northbound approach (GA 53)                 | A        | 6.4          | E        | 75.2         |
| southbound approach (GA 53)                 | B        | 10.4         | E        | 76.1         |
| eastbound approach                          | E        | 76.4         | <b>F</b> | <b>127.7</b> |
| westbound approach                          | D        | 49.9         | E        | 77.7         |

The outparcels' trips will generally be added to the major through movements at each study intersection, and will increase overall intersection delays at each location. The most significant impact of the outparcels will be incurred at the Canterbury intersection, which will serve as the primary access point to GA 53 for all of the outparcels. The operational analysis at this intersection shows that the overall intersection will deteriorate to LOS F in the p.m. and the side street left turns will experience extremely high delays. Because many of the new side street trips exiting the outparcels will be left turners, this intersection becomes a more likely candidate for signalization in the Future Phase Two condition. It is recommended that a signal warrant analysis be performed for this location in the future when the outparcels are planned to be developed. The Georgia DOT right turn lane analysis provided in the next section of this report indicates that a northbound right turn lane on GA 53 at this site access will be necessary in the Future Phase Two condition, when the outparcels are developed and operational.

## Georgia DOT Auxiliary Turn Lane Standards

The four primary site connection points to GA 53 will occur at Sportsman Club Road, across from Avonlea Way, across from Canterbury Road, and via Ahaluna Drive. All four locations are served by existing median breaks and southbound exclusive left turn lanes are already provided, which will serve the site entering left turn traffic, at each location. However, there are no northbound exclusive right turn lanes, which would serve site entering right turn traffic, at any of these locations. The standards proscribed in the Georgia DOT's *Regulations for Driveway and Encroachment Control* (Driveway Manual), revision 4.0, dated 3/15/2016, were reviewed for the requirements for right turn lanes. Table 10, below, is Table 4-6 from the Driveway Manual, and proscribes the right turn volume thresholds at which exclusive right turn lanes must be provided.

**Table 10 – Georgia DOT Minimum Volume Requirements for Right Turn Lanes**

| Posted Speed   | 2 Lane Routes |               | More than 2 Lanes on Main Road |               |
|----------------|---------------|---------------|--------------------------------|---------------|
|                | AADT          |               | AADT                           |               |
|                | < 6000        | >=6000        | <10000                         | >=10000       |
| 35 MPH or Less | 200 RTV a day | 100 RTV a day | 200 RTV a day                  | 100 RTV a day |
| 40 to 50 MPH   | 150 RTV a day | 75 RTV a day  | 150 RTV a day                  | 75 RTV a day  |
| 55 to 60 MPH   | 100 RTV a day | 50 RTV a day  | 100 RTV a day                  | 50 RTV a day  |
| >= 65 MPH      | Always        | Always        | Always                         | Always        |

**Table 4-6 Minimum Volumes Requiring Right Turn Lanes**

The AADT on GA 53 near Sportsman Club Road was identified previously in Table 2 in this report as 25,600 vpd in 2015, and the posted speed limit is 45 mph. For main roads with these conditions, a right turn lane must be provided when the right turn volume exceeds 75 right turn vehicles (RTV) per day. This study calculated a.m. and p.m. peak hour right turn volumes. As a general rule of thumb, p.m. peak hour volumes are typically about 10% of 24-hour volumes. However, field observations suggest that the off-peak activity turning into and out of these intersections currently is very low, so it is uncertain if the 10% rule of thumb is applicable. Using the a.m. and p.m. volume projections, and the 10% rule of thumb to estimate 24-hour RTVs, the existing, no-build, Future Phase One, and Future Phase Two volumes were tested against the Georgia DOT right turn lane standard at the four primary site access locations on GA 53. This analysis is summarized in Table 11.

**Table 11 – Georgia DOT Right Turn Lane Standards for Northbound GA 53**

| Intersection<br>GA 53 at: | 24-Hour<br>RTV<br>Threshold | Existing |      |       | No-Build |      |       | Future Phase One |      |       | Future Phase Two |      |       |
|---------------------------|-----------------------------|----------|------|-------|----------|------|-------|------------------|------|-------|------------------|------|-------|
|                           |                             | a.m.     | p.m. | 24-hr | a.m.     | p.m. | 24-hr | a.m.             | p.m. | 24-hr | a.m.             | p.m. | 24-hr |
| Sportsman                 | 75                          | 8        | 19   | 190   | 9        | 21   | 210   | 15               | 34   | 340   | 15               | 34   | 340   |
| Avonlea                   | 75                          | 0        | 0    | 0     | 0        | 0    | 0     | 2                | 17   | 170   | 2                | 17   | 170   |
| Canterbury                | 75                          | 0        | 0    | 0     | 0        | 0    | 0     | 3                | 4    | 40    | 40               | 128  | 1,280 |
| Ahaluna                   | 75                          | 11       | 38   | 380   | 12       | 42   | 420   | 47               | 114  | 1,140 | 47               | 114  | 1,140 |

The results in Table 11 indicate that a northbound right turn lane is possibly justified in the existing condition on GA 53 at Sportsman Club Road and almost certainly justified on GA 53 at Ahaluna Drive. The increase in volumes to the no-build condition will increase the justification for these right turn lanes. The Lanier Tract will add trips to each intersection and create the fourth approaches at the median breaks at Avonlea Way and Canterbury Road. Table 10 suggests that a northbound right turn lane is likely to be justified at the Avonlea Way access but not at the Canterbury access with the development of the Lanier Tract. With the development of the retail outparcels in Future Phase Two, a northbound right turn lane is also expected to be justified at the Canterbury access.

Table 12, below, is Table 4-8 from the Driveway Manual, and presents the Georgia DOT right turn lane design standards. Based on the posted 45 mph speed limit, each northbound right turn lane on GA 53 should include 175 feet of full-width storage and a 100 foot taper.

**Table 12 – Georgia DOT Design Standards for Right Turn Lanes**

| Speed, mph | Full Width Storage, ft. | Taper, ft. |
|------------|-------------------------|------------|
| 25         |                         | 50         |
| 30         | 75                      | 50         |
| 35         | 100                     | 50         |
| 40         | 150                     | 50         |
| 45         | 175                     | 100        |
| 50         | 225                     | 100        |
| 55         | 250                     | 100        |
| 60         | 300                     | 100        |
| 65         | 350                     | 100        |

**Table 4-8 Minimum Right Turn Deceleration Lengths**

The site plan also anticipates providing two right-in / right-out RIRO accesses to the office / retail tract and the plan anticipates providing deceleration lanes on GA 53 at both of these accesses. It is recommended that these anticipated deceleration lanes also be constructed to satisfy the Driveway Manual standards.

The project site engineer is referred to the Georgia DOT Driveway Manual for other driveway design standards including driveway width, island design, and curb return radii.

## Summary of Study Findings and Recommendations

The following is a summary of the findings and the recommendations of this traffic impact study at each intersection:

1. **Sportsman Club Road at Strickland Drive** – No changes are recommended at this intersection for the existing, no-build, or Future Phase One and Future Phase Two conditions.
2. **Dawsonville Highway at Sportsman Club Road** – The side street delays at this intersection are significant now and will increase in the future. While a warrant analysis was not performed as part of this traffic impact study, the low side street volumes make the intersection an unlikely candidate for signalization. The potential for justifying signalization will increase in the future, but side street volumes will continue to remain moderate. This study also identifies the need for a northbound exclusive right turn lane to be added on GA 53 at Sportsman Club Road. Northbound and southbound exclusive left turn lanes are currently provided at this median break.
3. **Dawsonville Highway at Avonlea Way** – Side street delays are high at the existing eastbound approach of Avonlea Way, and these delays will increase in the no-build and future conditions. The side street volumes are predominately right turners, with extremely low left turn volumes. The Lanier Tract will introduce a new fourth leg at the Avonlea Way intersection (there is an existing private residential driveway at this median break, which would be replaced by the Lanier Tract access). Northbound and southbound exclusive left turn lanes are currently provided at this median break. The volumes exiting the new Lanier Tract access will be low and many of them will be right turners. Therefore, this intersection is considered unlikely to be a candidate for signalization in the existing, no-build, and Future Phases One and Two, even with the addition of the Lanier Tract trips. The Georgia DOT right turn lane analysis suggests that a northbound exclusive right turn lane should be considered at this access and the site plan includes the addition of this lane. The new site access should be constructed with one entering lane and one exiting lane. The side street approach exiting the site should be controlled by side street stop sign and accompanying stop bar.
4. **Dawsonville Highway at Canterbury Road** – Side street delays are high on the existing eastbound approach of Canterbury Road and these delays will increase in the no-build and future conditions. As with Avonlea Way, the side street volumes at this intersection are predominately right turners, with extremely low left turn volumes. For this reason, this intersection is considered an unlikely candidate for signalization in the existing, no-build, and Future Phase One conditions. The outparcel access will align with Canterbury Road and the Lanier Tract will connect through the outparcels to GA 53 at this location. Northbound and southbound exclusive left turn lanes are currently provided at this median break. A short southbound deceleration lane is provided on GA 53 at Canterbury Road, though this lane does not appear to have been constructed to current Georgia DOT design standards. The northbound right turn volume will be low in the Future Phase One condition, and the Georgia DOT right turn lane analysis indicates that no decel lane will be required for Future Phase One. However, with the future development of the retail outparcels, by others, the right turn volumes will be significant, primarily due to the outparcels, and a northbound deceleration lane is recommended for this location. The Future Phase Two side street volumes exiting the outparcels will

be notable and this intersection will likely be a prime candidate for signalization upon development of the outparcels. It is recommended that at such time as the outparcels are planned to be developed, a signal warrant study be performed for this intersection according to the standards set forth in the Federal Highway Administration's *Manual On Uniform Traffic Control Devices* (MUTCD). This new access at the Canterbury Road median break should be constructed with at least one entering lane and an exiting shared left/through lane and an exclusive right turn lane. The two westbound lanes are in anticipation of the development of the outparcels. With only the Lanier Tract volumes, only one entering and one exiting lane would be required. Until signalization is warranted, the side street approach exiting the outparcel tracts should be controlled by side street stop sign and accompanying stop bar.

5. **Dawsonville Highway at Ahaluna Drive** – The review of Georgia DOT auxiliary lane standards indicates that a northbound right turn lane should be added on GA 53 at Ahaluna Drive in the existing condition. The future volumes exiting Ahaluna Drive would benefit from the addition of a second westbound lane, resulting in a shared left/through lane and an exclusive right turn lane on Ahaluna Drive at GA 53. This second lane would reduce the demand for side street greentime on the signal and improve side street levels of service. It was noted that the need for relocation of the signal steel strain pole, a drainage structure, and possibly a large brick monument sign, may reduce the feasibility of adding this second westbound lane. With the addition of Lanier Tract southbound left turns from GA 53, consideration should be given to adding a protected / permissive southbound left turn phase, which would match the existing protected / permissive phasing for the northbound left turn. The Georgia DOT left turn phase warrants are not satisfied for this southbound left turn based on volume projections alone. However, other factors such as high speeds on GA 53 and the senior residents expected to reside at the Lanier Tract, merit consideration. Field observations suggest that there may be an opportunity to shorten the cycle length, which would reduce time spent by vehicles waiting on the side street.
6. **Dawsonville Highway at North Lake Square Access** – This intersection operates acceptably in all analysis conditions. The side street approaches do incur some delays at all times, primarily due to the long cycle length on the signal, which allocates most of the greentime, appropriately, to GA 53. The side street delays are incurred by minimal volumes in the a.m., since the retail served by the side streets are generally not operational at that time. Higher volumes incur the side street delays in the p.m., when the retail is operational. However, overall this intersection operates appropriately and no mitigation is recommended for any analysis condition.
7. **Dawsonville Highway at Beachwood Boulevard** At the GA 53 / Beechwood Boulevard intersection, it is noted that a fourth leg is currently stubbed-out across from Beechwood Boulevard and a retail development is under construction on that site. Auxiliary left and right turn lanes are provided on GA 53 serving Beechwood Boulevard and the future fourth leg appears to be designed for right-in / right-out access only, with a northbound deceleration lane provided on GA 53. No changes are recommended at this intersection based on this study.
8. **Dawsonville Highway at McEver Road** – The lane configuration and signal phasing at this intersection are generally appropriate. The existing southbound right turn volume is sufficiently-high (828 a.m., 481 p.m.) to

merit consideration of the addition of a second exclusive right turn lane and/or the addition of a protected right turn overlap phase. The justification for adding this phasing and/or second right turn lane will increase as volumes increase. Finally, there may be an opportunity to reduce the cycle length and fine-tune the signal timing at this intersection.

9. **Dawsonville Highway at Green Hill Circle** – This signalized intersection incurs high sides street delays, again, due to the allocation of the majority of greentime to the Dawsonville Highway approaches. There may be an opportunity to reduce the cycle length and fine-tune the signal timing at this intersection.
10. **Dawsonville Highway at Shallowford Road** – The lane configuration and signal phasing are appropriate for this intersection. Reduction of the cycle length and optimization of the allocation of greentime could reduce delays and queuing at this intersection.



## Appendix A

### Traffic Count Data and Volume Worksheets

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**Intersection 1: Sportsman Club Road at Strickland Drive**

| Weekday A.M. Peak Hour                               | Northbound Sportsman Club Road |       |     | Southbound Sportsman Club Road |       |     |  | Westbound Strickland Drive |       |     |
|------------------------------------------------------|--------------------------------|-------|-----|--------------------------------|-------|-----|--|----------------------------|-------|-----|
|                                                      | T                              | R     | Tot | L                              | T     | Tot |  | L                          | R     | Tot |
| <b>Counted Volumes (Thursday, November 17, 2016)</b> | 6                              | 1     | 7   | 0                              | 23    | 23  |  | 10                         | 0     | 10  |
| Annual Background Growth                             | 10.4%                          | 10.4% |     | 10.4%                          | 10.4% |     |  | 10.4%                      | 10.4% |     |
| <b>No-Build Volumes</b>                              | 7                              | 1     | 8   | 0                              | 25    | 25  |  | 11                         | 0     | 11  |
| <b>Willow Springs Townhomes</b>                      | 0                              | 6     | 6   | 0                              | 0     | 0   |  | 12                         | 0     | 12  |
| Lanier Tract Senior Living Residential New Trips     | 0                              | 4     | 4   | 0                              | 0     | 0   |  | 7                          | 0     | 7   |
| Lanier Tract Office/Retail New Trips                 | 0                              | 0     | 0   | 0                              | 0     | 0   |  | 0                          | 0     | 0   |
| <b>Total Lanier Tract Site Trips</b>                 | 0                              | 4     | 4   | 0                              | 0     | 0   |  | 7                          | 0     | 7   |
| <b>Phase 1 Future Volumes</b>                        | 7                              | 11    | 18  | 0                              | 25    | 25  |  | 30                         | 0     | 30  |
| Retail Outparcels                                    | 0                              | 0     | 0   | 0                              | 0     | 0   |  | 0                          | 0     | 0   |
| <b>Phase 2 Future Volumes</b>                        | 7                              | 11    | 18  | 0                              | 25    | 25  |  | 30                         | 0     | 30  |

| Weekday P.M. Peak Hour                                | Northbound Sportsman Club Road |       |     | Southbound Sportsman Club Road |       |     |  | Westbound Strickland Drive |       |     |
|-------------------------------------------------------|--------------------------------|-------|-----|--------------------------------|-------|-----|--|----------------------------|-------|-----|
|                                                       | T                              | R     | Tot | L                              | T     | Tot |  | L                          | R     | Tot |
| <b>Counted Volumes (Thursday, September 17, 2015)</b> | 29                             | 9     | 38  | 0                              | 23    | 23  |  | 7                          | 0     | 7   |
| Annual Background Growth                              | 10.4%                          | 10.4% |     | 10.4%                          | 10.4% |     |  | 10.4%                      | 10.4% |     |
| <b>No-Build Volumes</b>                               | 32                             | 10    | 42  | 0                              | 25    | 25  |  | 8                          | 0     | 8   |
| <b>Willow Springs Townhomes</b>                       | 0                              | 12    | 12  | 0                              | 0     | 0   |  | 11                         | 0     | 11  |
| Lanier Tract Senior Living Residential New Trips      | 0                              | 6     | 6   | 0                              | 0     | 0   |  | 5                          | 0     | 5   |
| Lanier Tract Office/Retail New Trips                  | 0                              | 0     | 0   | 0                              | 0     | 0   |  | 0                          | 0     | 0   |
| <b>Total Lanier Tract Site Trips</b>                  | 0                              | 6     | 6   | 0                              | 0     | 0   |  | 5                          | 0     | 5   |
| <b>Phase 1 Future Volumes</b>                         | 32                             | 28    | 60  | 0                              | 25    | 25  |  | 24                         | 0     | 24  |
| Retail Outparcels                                     | 0                              | 0     | 0   | 0                              | 0     | 0   |  | 0                          | 0     | 0   |
| <b>Phase 2 Future Volumes</b>                         | 32                             | 28    | 60  | 0                              | 25    | 25  |  | 24                         | 0     | 24  |

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**Intersection 2: Georgia State Route 53 at Sportsman Club Road**

| Weekday A.M. Peak Hour                               |  | Northbound GA 53 |       |       |     | Southbound GA 53 |       |       |      | Eastbound turn lane |       |       |     | Westbound Sportsman Club Road |       |       |     |
|------------------------------------------------------|--|------------------|-------|-------|-----|------------------|-------|-------|------|---------------------|-------|-------|-----|-------------------------------|-------|-------|-----|
|                                                      |  | L                | T     | R     | Tot | L                | T     | R     | Tot  | L                   | T     | R     | Tot | L                             | T     | R     | Tot |
| <b>Counted Volumes (Thursday, November 17, 2016)</b> |  | 0                | 743   | 8     | 751 | 9                | 1687  | 0     | 1696 | 0                   | 0     | 0     | 0   | 25                            | 0     | 15    | 40  |
| Annual Background Growth                             |  | 10.4%            | 10.4% | 10.4% |     | 10.4%            | 10.4% | 10.4% |      | 10.4%               | 10.4% | 10.4% |     | 10.4%                         | 10.4% | 10.4% |     |
| <b>No-Build Volumes</b>                              |  | 0                | 820   | 9     | 829 | 10               | 1863  | 0     | 1873 | 0                   | 0     | 0     | 0   | 28                            | 0     | 17    | 44  |
| <b>Willow Springs Townhomes</b>                      |  | 0                | 0     | 4     | 4   | 2                | 0     | 0     | 2    | 0                   | 0     | 0     | 0   | 9                             | 0     | 3     | 12  |
| Lanier Tract Senior Living Residential New Trips     |  | 0                | 19    | 2     | 21  | 2                | 15    | 0     | 17   | 0                   | 0     | 0     | 0   | 4                             | 0     | 3     | 7   |
| Lanier Tract Office/Retail New Trips                 |  | 5                | 2     | 0     | 7   | 0                | 7     | 0     | 7    | 0                   | 0     | 0     | 0   | 0                             | 0     | 0     | 0   |
| <b>Total Lanier Tract Site Trips</b>                 |  | 5                | 21    | 2     | 28  | 2                | 22    | 0     | 24   | 0                   | 0     | 0     | 0   | 4                             | 0     | 3     | 7   |
| <b>Phase 1 Future Volumes</b>                        |  | 5                | 841   | 15    | 861 | 14               | 1885  | 0     | 1899 | 0                   | 0     | 0     | 0   | 41                            | 0     | 23    | 63  |
| Retail Outparcels                                    |  | 0                | 9     | 0     | 9   | 0                | 14    | 0     | 14   | 0                   | 0     | 0     | 0   | 0                             | 0     | 0     | 0   |
| <b>Phase 2 Future Volumes</b>                        |  | 5                | 850   | 15    | 870 | 14               | 1899  | 0     | 1913 | 0                   | 0     | 0     | 0   | 41                            | 0     | 23    | 63  |

| Weekday P.M. Peak Hour                                |  | Northbound GA 53 |       |       |      | Southbound GA 53 |       |       |      | Eastbound turn lane |       |       |     | Westbound Sportsman Club Road |       |       |     |
|-------------------------------------------------------|--|------------------|-------|-------|------|------------------|-------|-------|------|---------------------|-------|-------|-----|-------------------------------|-------|-------|-----|
|                                                       |  | L                | T     | R     | Tot  | L                | T     | R     | Tot  | L                   | T     | R     | Tot | L                             | T     | R     | Tot |
| <b>Counted Volumes (Thursday, September 17, 2015)</b> |  | 2                | 1671  | 19    | 1692 | 15               | 1039  | 0     | 1054 | 0                   | 0     | 0     | 0   | 28                            | 0     | 9     | 37  |
| Annual Background Growth                              |  | 10.4%            | 10.4% | 10.4% |      | 10.4%            | 10.4% | 10.4% |      | 10.4%               | 10.4% | 10.4% |     | 10.4%                         | 10.4% | 10.4% |     |
| <b>No-Build Volumes</b>                               |  | 2                | 1845  | 21    | 1868 | 17               | 1147  | 0     | 1164 | 0                   | 0     | 0     | 0   | 31                            | 0     | 10    | 41  |
| <b>Willow Springs Townhomes</b>                       |  | 0                | 0     | 9     | 9    | 3                | 0     | 0     | 3    | 0                   | 0     | 0     | 0   | 8                             | 0     | 3     | 11  |
| Lanier Tract Senior Living Residential New Trips      |  | 0                | 21    | 4     | 25   | 2                | 14    | 0     | 16   | 0                   | 0     | 0     | 0   | 3                             | 0     | 2     | 5   |
| Lanier Tract Office/Retail New Trips                  |  | 24               | 10    | 0     | 34   | 0                | 5     | 0     | 5    | 0                   | 0     | 0     | 0   | 0                             | 0     | 0     | 0   |
| <b>Total Lanier Tract Site Trips</b>                  |  | 24               | 31    | 4     | 59   | 2                | 19    | 0     | 21   | 0                   | 0     | 0     | 0   | 3                             | 0     | 2     | 5   |
| <b>Phase 1 Future Volumes</b>                         |  | 26               | 1876  | 34    | 1936 | 22               | 1166  | 0     | 1188 | 0                   | 0     | 0     | 0   | 42                            | 0     | 15    | 57  |
| Retail Outparcels                                     |  | 0                | 38    | 0     | 38   | 0                | 35    | 0     | 35   | 0                   | 0     | 0     | 0   | 0                             | 0     | 0     | 0   |
| <b>Phase 2 Future Volumes</b>                         |  | 26               | 1914  | 34    | 1974 | 22               | 1201  | 0     | 1223 | 0                   | 0     | 0     | 0   | 42                            | 0     | 15    | 57  |

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**Intersection 3: Georgia State Route 53 at Avonlea Way**

| Weekday A.M. Peak Hour                               | Northbound GA 53 |            |          |            | Southbound GA 53 |             |          |             | Eastbound Avonlea Way |          |           |           | Westbound Lanier Tract Access |          |           |           |
|------------------------------------------------------|------------------|------------|----------|------------|------------------|-------------|----------|-------------|-----------------------|----------|-----------|-----------|-------------------------------|----------|-----------|-----------|
|                                                      | L                | T          | R        | Tot        | L                | T           | R        | Tot         | L                     | T        | R         | Tot       | L                             | T        | R         | Tot       |
| <b>Counted Volumes (Thursday, November 17, 2016)</b> | 12               | 757        | 1        | 770        | 0                | 1668        | 6        | 1674        | 15                    | 0        | 72        | 87        | 0                             | 0        | 0         | 0         |
| Annual Background Growth                             | 10.4%            | 10.4%      | 10.4%    |            | 10.4%            | 10.4%       | 10.4%    |             | 10.4%                 | 10.4%    | 10.4%     |           | 10.4%                         | 10.4%    | 10.4%     |           |
| <b>No-Build Volumes</b>                              | <b>13</b>        | <b>836</b> | <b>1</b> | <b>850</b> | <b>0</b>         | <b>1842</b> | <b>7</b> | <b>1848</b> | <b>17</b>             | <b>0</b> | <b>79</b> | <b>96</b> | <b>0</b>                      | <b>0</b> | <b>0</b>  | <b>0</b>  |
| <b>Willow Springs Townhomes</b>                      | <b>0</b>         | <b>4</b>   | <b>0</b> | <b>4</b>   | <b>0</b>         | <b>9</b>    | <b>0</b> | <b>9</b>    | <b>0</b>              | <b>0</b> | <b>0</b>  | <b>0</b>  | <b>0</b>                      | <b>0</b> | <b>0</b>  | <b>0</b>  |
| Lanier Tract Senior Living Residential New Trips     | 0                | 9          | 1        | 10         | 8                | 11          | 0        | 19          | 0                     | 0        | 0         | 0         | 2                             | 0        | 13        | 15        |
| Lanier Tract Office/Retail New Trips                 | 0                | 17         | 0        | 17         | 7                | 5           | 0        | 12          | 0                     | 0        | 0         | 0         | 0                             | 0        | 0         | 0         |
| <b>Total Lanier Tract Site Trips</b>                 | <b>0</b>         | <b>26</b>  | <b>1</b> | <b>27</b>  | <b>15</b>        | <b>16</b>   | <b>0</b> | <b>31</b>   | <b>0</b>              | <b>0</b> | <b>0</b>  | <b>0</b>  | <b>2</b>                      | <b>0</b> | <b>13</b> | <b>15</b> |
| <b>Phase 1 Future Volumes</b>                        | <b>13</b>        | <b>866</b> | <b>2</b> | <b>881</b> | <b>15</b>        | <b>1867</b> | <b>7</b> | <b>1888</b> | <b>17</b>             | <b>0</b> | <b>79</b> | <b>96</b> | <b>2</b>                      | <b>0</b> | <b>13</b> | <b>15</b> |
| Retail Outparcels                                    | 0                | 9          | 0        | 9          | 0                | 14          | 0        | 14          | 0                     | 0        | 0         | 0         | 0                             | 0        | 0         | 0         |
| <b>Phase 2 Future Volumes</b>                        | <b>13</b>        | <b>875</b> | <b>2</b> | <b>890</b> | <b>15</b>        | <b>1881</b> | <b>7</b> | <b>1902</b> | <b>17</b>             | <b>0</b> | <b>79</b> | <b>96</b> | <b>2</b>                      | <b>0</b> | <b>13</b> | <b>15</b> |

| Weekday P.M. Peak Hour                                | Northbound GA 53 |             |           |             | Southbound GA 53 |             |           |             | Eastbound Avonlea Way |          |           |           | Westbound Lanier Tract Access |          |           |           |
|-------------------------------------------------------|------------------|-------------|-----------|-------------|------------------|-------------|-----------|-------------|-----------------------|----------|-----------|-----------|-------------------------------|----------|-----------|-----------|
|                                                       | L                | T           | R         | Tot         | L                | T           | R         | Tot         | L                     | T        | R         | Tot       | L                             | T        | R         | Tot       |
| <b>Counted Volumes (Thursday, September 17, 2015)</b> | 62               | 1650        | 0         | 1712        | 2                | 1102        | 14        | 1118        | 11                    | 0        | 47        | 58        | 0                             | 0        | 0         | 0         |
| Annual Background Growth                              | 10.4%            | 10.4%       | 10.4%     |             | 10.4%            | 10.4%       | 10.4%     |             | 10.4%                 | 10.4%    | 10.4%     |           | 10.4%                         | 10.4%    | 10.4%     |           |
| <b>No-Build Volumes</b>                               | <b>68</b>        | <b>1822</b> | <b>0</b>  | <b>1890</b> | <b>2</b>         | <b>1217</b> | <b>15</b> | <b>1234</b> | <b>12</b>             | <b>0</b> | <b>52</b> | <b>64</b> | <b>0</b>                      | <b>0</b> | <b>0</b>  | <b>0</b>  |
| <b>Willow Springs Townhomes</b>                       | <b>0</b>         | <b>9</b>    | <b>0</b>  | <b>9</b>    | <b>0</b>         | <b>8</b>    | <b>0</b>  | <b>8</b>    | <b>0</b>              | <b>0</b> | <b>0</b>  | <b>0</b>  | <b>0</b>                      | <b>0</b> | <b>0</b>  | <b>0</b>  |
| Lanier Tract Senior Living Residential New Trips      | 0                | 14          | 17        | 31          | 3                | 14          | 0         | 17          | 0                     | 0        | 0         | 0         | 2                             | 0        | 11        | 13        |
| Lanier Tract Office/Retail New Trips                  | 0                | 13          | 0         | 13          | 5                | 24          | 0         | 29          | 0                     | 0        | 0         | 0         | 0                             | 0        | 0         | 0         |
| <b>Total Lanier Tract Site Trips</b>                  | <b>0</b>         | <b>27</b>   | <b>17</b> | <b>44</b>   | <b>8</b>         | <b>38</b>   | <b>0</b>  | <b>46</b>   | <b>0</b>              | <b>0</b> | <b>0</b>  | <b>0</b>  | <b>2</b>                      | <b>0</b> | <b>11</b> | <b>13</b> |
| <b>Phase 1 Future Volumes</b>                         | <b>68</b>        | <b>1858</b> | <b>17</b> | <b>1943</b> | <b>10</b>        | <b>1263</b> | <b>15</b> | <b>1288</b> | <b>12</b>             | <b>0</b> | <b>52</b> | <b>64</b> | <b>2</b>                      | <b>0</b> | <b>11</b> | <b>13</b> |
| Retail Outparcels                                     | 0                | 38          | 0         | 38          | 0                | 35          | 0         | 35          | 0                     | 0        | 0         | 0         | 0                             | 0        | 0         | 0         |
| <b>Phase 2 Future Volumes</b>                         | <b>68</b>        | <b>1896</b> | <b>17</b> | <b>1981</b> | <b>10</b>        | <b>1298</b> | <b>15</b> | <b>1323</b> | <b>12</b>             | <b>0</b> | <b>52</b> | <b>64</b> | <b>2</b>                      | <b>0</b> | <b>11</b> | <b>13</b> |

**MARC R. ACAMPORA, PE, LLC**

# Lanier Tract Multi-Use DRI Traffic Impact Study

City of Gainesville, Georgia

April 2017

## Intersection 4: Georgia State Route 53 at Canterbury Road

| Weekday A.M. Peak Hour                           | Northbound GA 53 |       |    |     | Southbound GA 53 |       |       |      | Eastbound Canterbury Road |   |       |     | Westbound Lanier Tract Access |   |    |     |
|--------------------------------------------------|------------------|-------|----|-----|------------------|-------|-------|------|---------------------------|---|-------|-----|-------------------------------|---|----|-----|
|                                                  | L                | T     | R  | Tot | L                | T     | R     | Tot  | L                         | T | R     | Tot | L                             | T | R  | Tot |
| Counted Volumes (Thursday, November 17, 2016)    | 23               | 722   |    | 745 |                  | 1783  | 7     | 1790 | 18                        |   | 95    | 113 |                               |   |    |     |
| Annual Background Growth                         | 10.4%            | 10.4% |    |     |                  | 10.4% | 10.4% |      | 10.4%                     |   | 10.4% |     |                               |   |    |     |
| No-Build Volumes                                 | 25               | 797   |    | 823 |                  | 1969  | 8     | 1976 | 20                        |   | 105   | 125 |                               |   |    |     |
| Willow Springs Townhomes                         | 0                | 4     | 0  | 4   | 0                | 9     | 0     | 9    | 0                         | 0 | 0     | 0   | 0                             | 0 | 0  | 0   |
| Lanier Tract Senior Living Residential New Trips | 0                | 8     | 3  | 11  | 2                | 11    | 0     | 13   | 0                         | 0 | 0     | 0   | 3                             | 0 | 2  | 5   |
| Lanier Tract Office/Retail New Trips             | 0                | 17    | 0  | 17  | 0                | 5     | 0     | 5    | 0                         | 0 | 0     | 0   | 0                             | 0 | 0  | 0   |
| Total Lanier Tract Site Trips                    | 0                | 25    | 3  | 28  | 2                | 16    | 0     | 18   | 0                         | 0 | 0     | 0   | 3                             | 0 | 2  | 5   |
| Phase 1 Future Volumes                           | 25               | 826   | 3  | 855 | 2                | 1994  | 8     | 2003 | 20                        | 0 | 105   | 125 | 3                             | 0 | 2  | 5   |
| Retail Outparcels                                | 0                | 0     | 31 | 31  | 14               | 0     | 0     | 0    | 0                         | 0 | 0     | 0   | 18                            | 0 | 9  | 9   |
| Retail Outparcels Pass-by                        | 0                | -6    | 6  | 0   | 14               | -14   | 0     | -14  | 0                         | 0 | 0     | 0   | 8                             | 0 | 4  | 4   |
| Phase 2 Future Volumes                           | 25               | 820   | 40 | 886 | 30               | 1980  | 8     | 2017 | 20                        | 0 | 105   | 125 | 29                            | 0 | 15 | 44  |

| Weekday P.M. Peak Hour                           | Northbound GA 53 |       |     |      | Southbound GA 53 |       |       |      | Eastbound Canterbury Road |   |       |     | Westbound Lanier Tract Access |   |    |     |
|--------------------------------------------------|------------------|-------|-----|------|------------------|-------|-------|------|---------------------------|---|-------|-----|-------------------------------|---|----|-----|
|                                                  | L                | T     | R   | Tot  | L                | T     | R     | Tot  | L                         | T | R     | Tot | L                             | T | R  | Tot |
| Counted Volumes (Thursday, September 17, 2015)   | 111              | 1682  |     | 1793 |                  | 1108  | 14    | 1122 | 7                         |   | 28    | 35  |                               |   |    |     |
| Annual Background Growth                         | 10.4%            | 10.4% |     |      |                  | 10.4% | 10.4% |      | 10.4%                     |   | 10.4% |     |                               |   |    |     |
| No-Build Volumes                                 | 123              | 1857  |     | 1980 |                  | 1223  | 15    | 1239 | 8                         |   | 31    | 39  |                               |   |    |     |
| Willow Springs Townhomes                         | 0                | 9     | 0   | 9    | 0                | 8     | 0     | 8    | 0                         | 0 | 0     | 0   | 0                             | 0 | 0  | 0   |
| Lanier Tract Senior Living Residential New Trips | 0                | 29    | 4   | 33   | 3                | 13    | 0     | 16   | 0                         | 0 | 0     | 0   | 2                             | 0 | 2  | 4   |
| Lanier Tract Office/Retail New Trips             | 0                | 13    | 0   | 13   | 0                | 24    | 0     | 24   | 0                         | 0 | 0     | 0   | 0                             | 0 | 0  | 0   |
| Total Lanier Tract Site Trips                    | 0                | 42    | 4   | 46   | 3                | 37    | 0     | 40   | 0                         | 0 | 0     | 0   | 2                             | 0 | 2  | 4   |
| Phase 1 Future Volumes                           | 123              | 1908  | 4   | 2035 | 3                | 1268  | 15    | 1287 | 8                         | 0 | 31    | 39  | 2                             | 0 | 2  | 4   |
| Retail Outparcels                                | 0                | 0     | 76  | 76   | 35               | 0     | 0     | 0    | 0                         | 0 | 0     | 0   | 82                            | 0 | 38 | 38  |
| Retail Outparcels Pass-by                        | 0                | -48   | 48  | 0    | 30               | -30   | 0     | -30  | 0                         | 0 | 0     | 0   | 32                            | 0 | 52 | 52  |
| Phase 2 Future Volumes                           | 123              | 1860  | 128 | 2111 | 68               | 1238  | 15    | 1322 | 8                         | 0 | 31    | 39  | 116                           | 0 | 92 | 208 |

MARC R. ACAMPORA, PE, LLC

**Lanier Tract Multi-Use DRI Traffic Impact Study**  
City of Gainesville, Georgia

April 2017

**Intersection 5: Georgia State Route 53 at Lanier Valley Drive / Ahaluna Drive**

| Weekday A.M. Peak Hour                               | Northbound GA 53 |            |           |            | Southbound GA 53 |             |          |             | Eastbound Lanier Valley Drive |          |            |            | Westbound Ahaluna Drive |          |           |            |
|------------------------------------------------------|------------------|------------|-----------|------------|------------------|-------------|----------|-------------|-------------------------------|----------|------------|------------|-------------------------|----------|-----------|------------|
|                                                      | L                | T          | R         | Tot        | L                | T           | R        | Tot         | L                             | T        | R          | Tot        | L                       | T        | R         | Tot        |
| <b>Counted Volumes (Thursday, November 17, 2016)</b> | 55               | 701        | 11        | 767        | 14               | 1901        | 0        | 1915        | 19                            | 5        | 115        | 139        | 37                      | 3        | 20        | 60         |
| Annual Background Growth                             | 10.4%            | 10.4%      | 10.4%     |            | 10.4%            | 10.4%       | 10.4%    |             | 10.4%                         | 10.4%    | 10.4%      |            | 10.4%                   | 10.4%    | 10.4%     |            |
| <b>No-Build Volumes</b>                              | <b>61</b>        | <b>774</b> | <b>12</b> | <b>847</b> | <b>15</b>        | <b>2099</b> | <b>0</b> | <b>2114</b> | <b>21</b>                     | <b>6</b> | <b>127</b> | <b>153</b> | <b>41</b>               | <b>3</b> | <b>22</b> | <b>66</b>  |
| <b>Willow Springs Townhomes</b>                      | <b>0</b>         | <b>4</b>   | <b>0</b>  | <b>4</b>   | <b>0</b>         | <b>9</b>    | <b>0</b> | <b>9</b>    | <b>0</b>                      | <b>0</b> | <b>0</b>   | <b>0</b>   | <b>0</b>                | <b>0</b> | <b>0</b>  | <b>0</b>   |
| Lanier Tract Senior Living Residential New Trips     | 0                | 5          | 35        | 40         | 6                | 8           | 0        | 14          | 0                             | 0        | 0          | 0          | 51                      | 0        | 5         | 56         |
| Lanier Tract Office/Retail New Trips                 | 0                | 17         | 0         | 17         | 0                | 5           | 0        | 5           | 0                             | 0        | 0          | 0          | 0                       | 0        | 0         | 0          |
| <b>Total Lanier Tract Site Trips</b>                 | <b>0</b>         | <b>22</b>  | <b>35</b> | <b>57</b>  | <b>6</b>         | <b>13</b>   | <b>0</b> | <b>19</b>   | <b>0</b>                      | <b>0</b> | <b>0</b>   | <b>0</b>   | <b>51</b>               | <b>0</b> | <b>5</b>  | <b>56</b>  |
| <b>Phase 1 Future Volumes</b>                        | <b>61</b>        | <b>800</b> | <b>47</b> | <b>908</b> | <b>21</b>        | <b>2121</b> | <b>0</b> | <b>2142</b> | <b>21</b>                     | <b>6</b> | <b>127</b> | <b>153</b> | <b>92</b>               | <b>3</b> | <b>27</b> | <b>122</b> |
| Retail Outparcels                                    | 0                | 31         | 0         | 31         | 0                | 18          | 0        | 18          | 0                             | 0        | 0          | 0          | 0                       | 0        | 0         | 0          |
| <b>Phase 2 Future Volumes</b>                        | <b>61</b>        | <b>831</b> | <b>47</b> | <b>939</b> | <b>21</b>        | <b>2139</b> | <b>0</b> | <b>2160</b> | <b>21</b>                     | <b>6</b> | <b>127</b> | <b>153</b> | <b>92</b>               | <b>3</b> | <b>27</b> | <b>122</b> |

| Weekday P.M. Peak Hour                                | Northbound GA 53 |             |            |             | Southbound GA 53 |             |          |             | Eastbound Lanier Valley Drive |          |            |            | Westbound Ahaluna Drive |          |           |            |
|-------------------------------------------------------|------------------|-------------|------------|-------------|------------------|-------------|----------|-------------|-------------------------------|----------|------------|------------|-------------------------|----------|-----------|------------|
|                                                       | L                | T           | R          | Tot         | L                | T           | R        | Tot         | L                             | T        | R          | Tot        | L                       | T        | R         | Tot        |
| <b>Counted Volumes (Thursday, September 17, 2015)</b> | 179              | 1737        | 38         | 1954        | 22               | 1201        | 3        | 1226        | 21                            | 1        | 96         | 118        | 37                      | 7        | 51        | 95         |
| Annual Background Growth                              | 10.4%            | 10.4%       | 10.4%      |             | 10.4%            | 10.4%       | 10.4%    |             | 10.4%                         | 10.4%    | 10.4%      |            | 10.4%                   | 10.4%    | 10.4%     |            |
| <b>No-Build Volumes</b>                               | <b>198</b>       | <b>1918</b> | <b>42</b>  | <b>2157</b> | <b>24</b>        | <b>1326</b> | <b>3</b> | <b>1354</b> | <b>23</b>                     | <b>1</b> | <b>106</b> | <b>130</b> | <b>41</b>               | <b>8</b> | <b>56</b> | <b>105</b> |
| <b>Willow Springs Townhomes</b>                       | <b>0</b>         | <b>9</b>    | <b>0</b>   | <b>9</b>    | <b>0</b>         | <b>8</b>    | <b>0</b> | <b>8</b>    | <b>0</b>                      | <b>0</b> | <b>0</b>   | <b>0</b>   | <b>0</b>                | <b>0</b> | <b>0</b>  | <b>0</b>   |
| Lanier Tract Senior Living Residential New Trips      | 0                | 25          | 72         | 97          | 7                | 8           | 0        | 15          | 0                             | 0        | 0          | 0          | 57                      | 0        | 8         | 65         |
| Lanier Tract Office/Retail New Trips                  | 0                | 13          | 0          | 13          | 0                | 24          | 0        | 24          | 0                             | 0        | 0          | 0          | 0                       | 0        | 0         | 0          |
| <b>Total Lanier Tract Site Trips</b>                  | <b>0</b>         | <b>38</b>   | <b>72</b>  | <b>110</b>  | <b>7</b>         | <b>32</b>   | <b>0</b> | <b>39</b>   | <b>0</b>                      | <b>0</b> | <b>0</b>   | <b>0</b>   | <b>57</b>               | <b>0</b> | <b>8</b>  | <b>65</b>  |
| <b>Phase 1 Future Volumes</b>                         | <b>198</b>       | <b>1965</b> | <b>114</b> | <b>2276</b> | <b>31</b>        | <b>1366</b> | <b>3</b> | <b>1401</b> | <b>23</b>                     | <b>1</b> | <b>106</b> | <b>130</b> | <b>98</b>               | <b>8</b> | <b>64</b> | <b>170</b> |
| Retail Outparcels                                     | 0                | 76          | 0          | 76          | 0                | 82          | 0        | 82          | 0                             | 0        | 0          | 0          | 0                       | 0        | 0         | 0          |
| <b>Phase 2 Future Volumes</b>                         | <b>198</b>       | <b>2041</b> | <b>114</b> | <b>2352</b> | <b>31</b>        | <b>1448</b> | <b>3</b> | <b>1483</b> | <b>23</b>                     | <b>1</b> | <b>106</b> | <b>130</b> | <b>98</b>               | <b>8</b> | <b>64</b> | <b>170</b> |

**MARC R. ACAMPORA, PE, LLC**

**Lanier Tract Multi-Use DRI Traffic Impact Study**  
City of Gainesville, Georgia

April 2017

**Intersection 6: Georgia State Route 53 at North Lake Square / Olive Garden Access**

| Weekday A.M. Peak Hour                             | Northbound GA 53 |            |           |            | Southbound GA 53 |             |          |             | Eastbound Olive Garden Access |          |          |          | Westbound North Lake Square |          |          |          |
|----------------------------------------------------|------------------|------------|-----------|------------|------------------|-------------|----------|-------------|-------------------------------|----------|----------|----------|-----------------------------|----------|----------|----------|
|                                                    | L                | T          | R         | Tot        | L                | T           | R        | Tot         | L                             | T        | R        | Tot      | L                           | T        | R        | Tot      |
| <b>Counted Volumes (Wednesday, March 22, 2017)</b> | 11               | 740        | 9         | 760        | 5                | 1989        | 4        | 1998        | 2                             | 0        | 6        | 8        | 2                           | 0        | 0        | 2        |
| Annual Background Growth                           | 10.4%            | 10.4%      | 10.4%     |            | 10.4%            | 10.4%       | 10.4%    |             | 10.4%                         | 10.4%    | 10.4%    |          | 10.4%                       | 10.4%    | 10.4%    |          |
| <b>No-Build Volumes</b>                            | <b>12</b>        | <b>817</b> | <b>10</b> | <b>839</b> | <b>6</b>         | <b>2196</b> | <b>4</b> | <b>2206</b> | <b>2</b>                      | <b>0</b> | <b>7</b> | <b>9</b> | <b>2</b>                    | <b>0</b> | <b>0</b> | <b>2</b> |
| <b>Willow Springs Townhomes</b>                    | <b>0</b>         | <b>4</b>   | <b>0</b>  | <b>4</b>   | <b>0</b>         | <b>9</b>    | <b>0</b> | <b>9</b>    | <b>0</b>                      | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b>                    | <b>0</b> | <b>0</b> | <b>0</b> |
| Lanier Tract Senior Living Residential New Trips   | 0                | 40         | 0         | 40         | 0                | 59          | 0        | 59          | 0                             | 0        | 0        | 0        | 0                           | 0        | 0        | 0        |
| Lanier Tract Office/Retail New Trips               | 0                | 17         | 0         | 17         | 0                | 5           | 0        | 5           | 0                             | 0        | 0        | 0        | 0                           | 0        | 0        | 0        |
| <b>Total Lanier Tract Site Trips</b>               | <b>0</b>         | <b>57</b>  | <b>0</b>  | <b>57</b>  | <b>0</b>         | <b>64</b>   | <b>0</b> | <b>64</b>   | <b>0</b>                      | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b>                    | <b>0</b> | <b>0</b> | <b>0</b> |
| <b>Phase 1 Future Volumes</b>                      | <b>12</b>        | <b>878</b> | <b>10</b> | <b>900</b> | <b>6</b>         | <b>2269</b> | <b>4</b> | <b>2279</b> | <b>2</b>                      | <b>0</b> | <b>7</b> | <b>9</b> | <b>2</b>                    | <b>0</b> | <b>0</b> | <b>2</b> |
| Retail Outparcels                                  | 0                | 31         | 0         | 31         | 0                | 18          | 0        | 18          | 0                             | 0        | 0        | 0        | 0                           | 0        | 0        | 0        |
| <b>Phase 2 Future Volumes</b>                      | <b>12</b>        | <b>909</b> | <b>10</b> | <b>931</b> | <b>6</b>         | <b>2287</b> | <b>4</b> | <b>2297</b> | <b>2</b>                      | <b>0</b> | <b>7</b> | <b>9</b> | <b>2</b>                    | <b>0</b> | <b>0</b> | <b>2</b> |

| Weekday P.M. Peak Hour                             | Northbound GA 53 |             |            |             | Southbound GA 53 |             |           |             | Eastbound Olive Garden Access |          |           |           | Westbound North Lake Square |          |           |            |
|----------------------------------------------------|------------------|-------------|------------|-------------|------------------|-------------|-----------|-------------|-------------------------------|----------|-----------|-----------|-----------------------------|----------|-----------|------------|
|                                                    | L                | T           | R          | Tot         | L                | T           | R         | Tot         | L                             | T        | R         | Tot       | L                           | T        | R         | Tot        |
| <b>Counted Volumes (Wednesday, March 22, 2017)</b> | 87               | 1763        | 138        | 1988        | 19               | 1199        | 27        | 1245        | 13                            | 3        | 60        | 76        | 118                         | 7        | 42        | 167        |
| Annual Background Growth                           | 10.4%            | 10.4%       | 10.4%      |             | 10.4%            | 10.4%       | 10.4%     |             | 10.4%                         | 10.4%    | 10.4%     |           | 10.4%                       | 10.4%    | 10.4%     |            |
| <b>No-Build Volumes</b>                            | <b>96</b>        | <b>1947</b> | <b>152</b> | <b>2195</b> | <b>21</b>        | <b>1324</b> | <b>30</b> | <b>1375</b> | <b>14</b>                     | <b>3</b> | <b>66</b> | <b>84</b> | <b>130</b>                  | <b>8</b> | <b>46</b> | <b>184</b> |
| <b>Willow Springs Townhomes</b>                    | <b>0</b>         | <b>9</b>    | <b>0</b>   | <b>9</b>    | <b>0</b>         | <b>8</b>    | <b>0</b>  | <b>8</b>    | <b>0</b>                      | <b>0</b> | <b>0</b>  | <b>0</b>  | <b>0</b>                    | <b>0</b> | <b>0</b>  | <b>0</b>   |
| Lanier Tract Senior Living Residential New Trips   | 0                | 97          | 0          | 97          | 0                | 65          | 0         | 65          | 0                             | 0        | 0         | 0         | 0                           | 0        | 0         | 0          |
| Lanier Tract Office/Retail New Trips               | 0                | 13          | 0          | 13          | 0                | 24          | 0         | 24          | 0                             | 0        | 0         | 0         | 0                           | 0        | 0         | 0          |
| <b>Total Lanier Tract Site Trips</b>               | <b>0</b>         | <b>110</b>  | <b>0</b>   | <b>110</b>  | <b>0</b>         | <b>89</b>   | <b>0</b>  | <b>89</b>   | <b>0</b>                      | <b>0</b> | <b>0</b>  | <b>0</b>  | <b>0</b>                    | <b>0</b> | <b>0</b>  | <b>0</b>   |
| <b>Phase 1 Future Volumes</b>                      | <b>96</b>        | <b>2066</b> | <b>152</b> | <b>2314</b> | <b>21</b>        | <b>1421</b> | <b>30</b> | <b>1472</b> | <b>14</b>                     | <b>3</b> | <b>66</b> | <b>84</b> | <b>130</b>                  | <b>8</b> | <b>46</b> | <b>184</b> |
| Retail Outparcels                                  | 0                | 76          | 0          | 76          | 0                | 82          | 0         | 82          | 0                             | 0        | 0         | 0         | 0                           | 0        | 0         | 0          |
| <b>Phase 2 Future Volumes</b>                      | <b>96</b>        | <b>2142</b> | <b>152</b> | <b>2390</b> | <b>21</b>        | <b>1503</b> | <b>30</b> | <b>1554</b> | <b>14</b>                     | <b>3</b> | <b>66</b> | <b>84</b> | <b>130</b>                  | <b>8</b> | <b>46</b> | <b>184</b> |

**MARC R. ACAMPORA, PE, LLC**



**Lanier Tract Multi-Use DRI Traffic Impact Study**  
City of Gainesville, Georgia

April 2017

**Intersection 7: Georgia State Route 53 at Beechwood Boulevard**

| <b>Weekday A.M. Peak Hour</b>                        |                         |            |            |                         |          |             |                                      |           |            |  |
|------------------------------------------------------|-------------------------|------------|------------|-------------------------|----------|-------------|--------------------------------------|-----------|------------|--|
|                                                      | <b>Northbound GA 53</b> |            |            | <b>Southbound GA 53</b> |          |             | <b>Eastbound Beechwood Boulevard</b> |           |            |  |
|                                                      | <b>L</b>                | <b>T</b>   | <b>Tot</b> | <b>T</b>                | <b>R</b> | <b>Tot</b>  | <b>L</b>                             | <b>R</b>  | <b>Tot</b> |  |
| <b>Counted Volumes (Thursday, November 17, 2016)</b> | 27                      | 787        | 814        | 2006                    | 2        | 2008        | 5                                    | 41        | 46         |  |
| Annual Background Growth                             | 10.4%                   | 10.4%      |            | 10.4%                   | 10.4%    |             | 10.4%                                | 10.4%     |            |  |
| <b>No-Build Volumes</b>                              | <b>30</b>               | <b>869</b> | <b>899</b> | <b>2215</b>             | <b>2</b> | <b>2217</b> | <b>6</b>                             | <b>45</b> | <b>51</b>  |  |
| <b>Willow Springs Townhomes</b>                      | <b>0</b>                | <b>4</b>   | <b>4</b>   | <b>9</b>                | <b>0</b> | <b>9</b>    | <b>0</b>                             | <b>0</b>  | <b>0</b>   |  |
| Lanier Tract Senior Living Residential New Trips     | 0                       | 40         | 40         | 59                      | 0        | 59          | 0                                    | 0         | 0          |  |
| Lanier Tract Office/Retail New Trips                 | 0                       | 17         | 17         | 5                       | 0        | 5           | 0                                    | 0         | 0          |  |
| <b>Total Lanier Tract Site Trips</b>                 | <b>0</b>                | <b>57</b>  | <b>57</b>  | <b>64</b>               | <b>0</b> | <b>64</b>   | <b>0</b>                             | <b>0</b>  | <b>0</b>   |  |
| <b>Phase 1 Future Volumes</b>                        | <b>30</b>               | <b>930</b> | <b>960</b> | <b>2288</b>             | <b>2</b> | <b>2290</b> | <b>6</b>                             | <b>45</b> | <b>51</b>  |  |
| Retail Outparcels                                    | 0                       | 31         | 31         | 18                      | 0        | 18          | 0                                    | 0         | 0          |  |
| <b>Phase 2 Future Volumes</b>                        | <b>30</b>               | <b>961</b> | <b>991</b> | <b>2306</b>             | <b>2</b> | <b>2308</b> | <b>6</b>                             | <b>45</b> | <b>51</b>  |  |

| <b>Weekday P.M. Peak Hour</b>                         |                         |             |             |                         |           |             |                                      |           |            |  |
|-------------------------------------------------------|-------------------------|-------------|-------------|-------------------------|-----------|-------------|--------------------------------------|-----------|------------|--|
|                                                       | <b>Northbound GA 53</b> |             |             | <b>Southbound GA 53</b> |           |             | <b>Eastbound Beechwood Boulevard</b> |           |            |  |
|                                                       | <b>L</b>                | <b>T</b>    | <b>Tot</b>  | <b>T</b>                | <b>R</b>  | <b>Tot</b>  | <b>L</b>                             | <b>R</b>  | <b>Tot</b> |  |
| <b>Counted Volumes (Thursday, September 17, 2015)</b> | 86                      | 1998        | 2084        | 1388                    | 9         | 1397        | 1                                    | 47        | 48         |  |
| Annual Background Growth                              | 10.4%                   | 10.4%       |             | 10.4%                   | 10.4%     |             | 10.4%                                | 10.4%     |            |  |
| <b>No-Build Volumes</b>                               | <b>95</b>               | <b>2206</b> | <b>2301</b> | <b>1532</b>             | <b>10</b> | <b>1542</b> | <b>1</b>                             | <b>52</b> | <b>53</b>  |  |
| <b>Willow Springs Townhomes</b>                       | <b>0</b>                | <b>9</b>    | <b>9</b>    | <b>8</b>                | <b>0</b>  | <b>8</b>    | <b>0</b>                             | <b>0</b>  | <b>0</b>   |  |
| Lanier Tract Senior Living Residential New Trips      | 0                       | 97          | 97          | 65                      | 0         | 65          | 0                                    | 0         | 0          |  |
| Lanier Tract Office/Retail New Trips                  | 0                       | 13          | 13          | 24                      | 0         | 24          | 0                                    | 0         | 0          |  |
| <b>Total Lanier Tract Site Trips</b>                  | <b>0</b>                | <b>110</b>  | <b>110</b>  | <b>89</b>               | <b>0</b>  | <b>89</b>   | <b>0</b>                             | <b>0</b>  | <b>0</b>   |  |
| <b>Phase 1 Future Volumes</b>                         | <b>95</b>               | <b>2325</b> | <b>2420</b> | <b>1629</b>             | <b>10</b> | <b>1639</b> | <b>1</b>                             | <b>52</b> | <b>53</b>  |  |
| Retail Outparcels                                     | 0                       | 76          | 76          | 82                      | 0         | 82          | 0                                    | 0         | 0          |  |
| <b>Phase 2 Future Volumes</b>                         | <b>95</b>               | <b>2401</b> | <b>2496</b> | <b>1711</b>             | <b>10</b> | <b>1721</b> | <b>1</b>                             | <b>52</b> | <b>53</b>  |  |

**MARC R. ACAMPORA, PE, LLC**

**Lanier Tract Multi-Use DRI Traffic Impact Study**  
City of Gainesville, Georgia

April 2017

**Intersection 8: Georgia State Route 53 - Dawsonville Highway at McEver Road / Commercial Access**

| Weekday A.M. Peak Hour                               | Northbound Dawsonville Highway |            |           |            | Southbound Dawsonville Highway |             |            |             | Eastbound McEver Road |           |            |            | Westbound Commercial Access |           |           |           |
|------------------------------------------------------|--------------------------------|------------|-----------|------------|--------------------------------|-------------|------------|-------------|-----------------------|-----------|------------|------------|-----------------------------|-----------|-----------|-----------|
|                                                      | L                              | T          | R         | Tot        | L                              | T           | R          | Tot         | L                     | T         | R          | Tot        | L                           | T         | R         | Tot       |
| <b>Counted Volumes (Thursday, November 17, 2016)</b> | 282                            | 465        | 55        | 802        | 28                             | 1170        | 828        | 2026        | 390                   | 28        | 342        | 760        | 42                          | 19        | 18        | 79        |
| Annual Background Growth                             | 10.4%                          | 10.4%      | 10.4%     |            | 10.4%                          | 10.4%       | 10.4%      |             | 10.4%                 | 10.4%     | 10.4%      |            | 10.4%                       | 10.4%     | 10.4%     |           |
| <b>No-Build Volumes</b>                              | <b>311</b>                     | <b>513</b> | <b>61</b> | <b>885</b> | <b>31</b>                      | <b>1292</b> | <b>914</b> | <b>2237</b> | <b>431</b>            | <b>31</b> | <b>378</b> | <b>839</b> | <b>46</b>                   | <b>21</b> | <b>20</b> | <b>87</b> |
| <b>Willow Springs Townhomes</b>                      | <b>0</b>                       | <b>3</b>   | <b>0</b>  | <b>3</b>   | <b>0</b>                       | <b>6</b>    | <b>3</b>   | <b>9</b>    | <b>1</b>              | <b>0</b>  | <b>0</b>   | <b>1</b>   | <b>0</b>                    | <b>0</b>  | <b>0</b>  | <b>0</b>  |
| Lanier Tract Senior Living Residential New Trips     | 0                              | 27         | 0         | 27         | 3                              | 40          | 16         | 59          | 11                    | 0         | 0          | 11         | 0                           | 0         | 2         | 2         |
| Lanier Tract Office/Retail New Trips                 | 0                              | 10         | 0         | 10         | 0                              | 3           | 2          | 5           | 7                     | 0         | 0          | 7          | 0                           | 0         | 0         | 0         |
| <b>Total Lanier Tract Site Trips</b>                 | <b>0</b>                       | <b>37</b>  | <b>0</b>  | <b>37</b>  | <b>3</b>                       | <b>43</b>   | <b>18</b>  | <b>64</b>   | <b>18</b>             | <b>0</b>  | <b>0</b>   | <b>18</b>  | <b>0</b>                    | <b>0</b>  | <b>2</b>  | <b>2</b>  |
| <b>Phase 1 Future Volumes</b>                        | <b>311</b>                     | <b>553</b> | <b>61</b> | <b>925</b> | <b>34</b>                      | <b>1341</b> | <b>935</b> | <b>2310</b> | <b>450</b>            | <b>31</b> | <b>378</b> | <b>858</b> | <b>46</b>                   | <b>21</b> | <b>22</b> | <b>89</b> |
| Retail Outparcels                                    | 0                              | 19         | 0         | 19         | 0                              | 11          | 7          | 18          | 12                    | 0         | 0          | 0          | 0                           | 0         | 0         | 0         |
| <b>Phase 2 Future Volumes</b>                        | <b>311</b>                     | <b>572</b> | <b>61</b> | <b>944</b> | <b>34</b>                      | <b>1352</b> | <b>942</b> | <b>2328</b> | <b>462</b>            | <b>31</b> | <b>378</b> | <b>870</b> | <b>46</b>                   | <b>21</b> | <b>22</b> | <b>89</b> |

| Weekday P.M. Peak Hour                                | Northbound Dawsonville Highway |             |           |             | Southbound Dawsonville Highway |             |            |             | Eastbound McEver Road |            |            |             | Westbound Commercial Access |            |           |            |
|-------------------------------------------------------|--------------------------------|-------------|-----------|-------------|--------------------------------|-------------|------------|-------------|-----------------------|------------|------------|-------------|-----------------------------|------------|-----------|------------|
|                                                       | L                              | T           | R         | Tot         | L                              | T           | R          | Tot         | L                     | T          | R          | Tot         | L                           | T          | R         | Tot        |
| <b>Counted Volumes (Thursday, September 17, 2015)</b> | 433                            | 1362        | 46        | 1841        | 62                             | 1029        | 481        | 1572        | 845                   | 213        | 386        | 1444        | 87                          | 91         | 81        | 259        |
| Annual Background Growth                              | 10.4%                          | 10.4%       | 10.4%     |             | 10.4%                          | 10.4%       | 10.4%      |             | 10.4%                 | 10.4%      | 10.4%      |             | 10.4%                       | 10.4%      | 10.4%     |            |
| <b>No-Build Volumes</b>                               | <b>478</b>                     | <b>1504</b> | <b>51</b> | <b>2033</b> | <b>68</b>                      | <b>1136</b> | <b>531</b> | <b>1736</b> | <b>933</b>            | <b>235</b> | <b>426</b> | <b>1594</b> | <b>96</b>                   | <b>100</b> | <b>89</b> | <b>286</b> |
| <b>Willow Springs Townhomes</b>                       | <b>0</b>                       | <b>6</b>    | <b>0</b>  | <b>6</b>    | <b>0</b>                       | <b>5</b>    | <b>3</b>   | <b>8</b>    | <b>3</b>              | <b>0</b>   | <b>0</b>   | <b>3</b>    | <b>0</b>                    | <b>0</b>   | <b>0</b>  | <b>0</b>   |
| Lanier Tract Senior Living Residential New Trips      | 0                              | 67          | 0         | 67          | 3                              | 44          | 18         | 65          | 26                    | 0          | 0          | 26          | 0                           | 0          | 4         | 4          |
| Lanier Tract Office/Retail New Trips                  | 0                              | 8           | 0         | 8           | 0                              | 14          | 10         | 24          | 5                     | 0          | 0          | 5           | 0                           | 0          | 0         | 0          |
| <b>Total Lanier Tract Site Trips</b>                  | <b>0</b>                       | <b>75</b>   | <b>0</b>  | <b>75</b>   | <b>3</b>                       | <b>58</b>   | <b>28</b>  | <b>89</b>   | <b>31</b>             | <b>0</b>   | <b>0</b>   | <b>31</b>   | <b>0</b>                    | <b>0</b>   | <b>4</b>  | <b>4</b>   |
| <b>Phase 1 Future Volumes</b>                         | <b>478</b>                     | <b>1585</b> | <b>51</b> | <b>2114</b> | <b>71</b>                      | <b>1199</b> | <b>562</b> | <b>1833</b> | <b>967</b>            | <b>235</b> | <b>426</b> | <b>1628</b> | <b>96</b>                   | <b>100</b> | <b>93</b> | <b>290</b> |
| Retail Outparcels                                     | 0                              | 47          | 0         | 47          | 0                              | 50          | 32         | 82          | 29                    | 0          | 0          | 0           | 0                           | 0          | 0         | 0          |
| <b>Phase 2 Future Volumes</b>                         | <b>478</b>                     | <b>1632</b> | <b>51</b> | <b>2161</b> | <b>71</b>                      | <b>1249</b> | <b>594</b> | <b>1915</b> | <b>996</b>            | <b>235</b> | <b>426</b> | <b>1657</b> | <b>96</b>                   | <b>100</b> | <b>93</b> | <b>290</b> |

**MARC R. ACAMPORA, PE, LLC**

**Lanier Tract Multi-Use DRI Traffic Impact Study**  
City of Gainesville, Georgia

April 2017

**Intersection 9: Dawsonville Highway at Green Hill Circle / Commercial Access**

| Weekday A.M. Peak Hour                               | Northbound Dawsonville Highway |            |           |             | Southbound Dawsonville Highway |             |           |             | Eastbound Green Hill Circle |          |            |            | Westbound Commercial Access |          |          |           |
|------------------------------------------------------|--------------------------------|------------|-----------|-------------|--------------------------------|-------------|-----------|-------------|-----------------------------|----------|------------|------------|-----------------------------|----------|----------|-----------|
|                                                      | L                              | T          | R         | Tot         | L                              | T           | R         | Tot         | L                           | T        | R          | Tot        | L                           | T        | R        | Tot       |
| <b>Counted Volumes (Thursday, November 17, 2016)</b> | 135                            | 754        | 10        | 899         | 12                             | 1404        | 52        | 1468        | 67                          | 1        | 141        | 209        | 6                           | 1        | 4        | 11        |
| Annual Background Growth                             | 10.4%                          | 10.4%      | 10.4%     |             | 10.4%                          | 10.4%       | 10.4%     |             | 10.4%                       | 10.4%    | 10.4%      |            | 10.4%                       | 10.4%    | 10.4%    |           |
| <b>No-Build Volumes</b>                              | <b>149</b>                     | <b>832</b> | <b>11</b> | <b>993</b>  | <b>13</b>                      | <b>1550</b> | <b>57</b> | <b>1621</b> | <b>74</b>                   | <b>1</b> | <b>156</b> | <b>231</b> | <b>7</b>                    | <b>1</b> | <b>4</b> | <b>12</b> |
| <b>Willow Springs Townhomes</b>                      | <b>0</b>                       | <b>3</b>   | <b>0</b>  | <b>3</b>    | <b>0</b>                       | <b>6</b>    | <b>0</b>  | <b>6</b>    | <b>0</b>                    | <b>0</b> | <b>0</b>   | <b>0</b>   | <b>0</b>                    | <b>0</b> | <b>0</b> | <b>0</b>  |
| Lanier Tract Senior Living Residential New Trips     | 0                              | 27         | 0         | 27          | 0                              | 40          | 0         | 40          | 0                           | 0        | 0          | 0          | 0                           | 0        | 0        | 0         |
| Lanier Tract Office/Retail New Trips                 | 0                              | 10         | 0         | 10          | 0                              | 3           | 0         | 3           | 0                           | 0        | 0          | 0          | 0                           | 0        | 0        | 0         |
| <b>Total Lanier Tract Site Trips</b>                 | <b>0</b>                       | <b>37</b>  | <b>0</b>  | <b>37</b>   | <b>0</b>                       | <b>43</b>   | <b>0</b>  | <b>43</b>   | <b>0</b>                    | <b>0</b> | <b>0</b>   | <b>0</b>   | <b>0</b>                    | <b>0</b> | <b>0</b> | <b>0</b>  |
| <b>Phase 1 Future Volumes</b>                        | <b>149</b>                     | <b>872</b> | <b>11</b> | <b>1033</b> | <b>13</b>                      | <b>1599</b> | <b>57</b> | <b>1670</b> | <b>74</b>                   | <b>1</b> | <b>156</b> | <b>231</b> | <b>7</b>                    | <b>1</b> | <b>4</b> | <b>12</b> |
| Retail Outparcels                                    | 0                              | 19         | 0         | 19          | 0                              | 11          | 0         | 11          | 0                           | 0        | 0          | 0          | 0                           | 0        | 0        | 0         |
| <b>Phase 2 Future Volumes</b>                        | <b>149</b>                     | <b>891</b> | <b>11</b> | <b>1052</b> | <b>13</b>                      | <b>1610</b> | <b>57</b> | <b>1681</b> | <b>74</b>                   | <b>1</b> | <b>156</b> | <b>231</b> | <b>7</b>                    | <b>1</b> | <b>4</b> | <b>12</b> |

| Weekday P.M. Peak Hour                                | Northbound Dawsonville Highway |             |           |             | Southbound Dawsonville Highway |             |           |             | Eastbound Green Hill Circle |           |            |            | Westbound Commercial Access |           |           |            |
|-------------------------------------------------------|--------------------------------|-------------|-----------|-------------|--------------------------------|-------------|-----------|-------------|-----------------------------|-----------|------------|------------|-----------------------------|-----------|-----------|------------|
|                                                       | L                              | T           | R         | Tot         | L                              | T           | R         | Tot         | L                           | T         | R          | Tot        | L                           | T         | R         | Tot        |
| <b>Counted Volumes (Thursday, September 17, 2015)</b> | 248                            | 1749        | 70        | 2067        | 40                             | 1392        | 53        | 1485        | 132                         | 9         | 138        | 279        | 60                          | 20        | 38        | 118        |
| Annual Background Growth                              | 10.4%                          | 10.4%       | 10.4%     |             | 10.4%                          | 10.4%       | 10.4%     |             | 10.4%                       | 10.4%     | 10.4%      |            | 10.4%                       | 10.4%     | 10.4%     |            |
| <b>No-Build Volumes</b>                               | <b>274</b>                     | <b>1931</b> | <b>77</b> | <b>2282</b> | <b>44</b>                      | <b>1537</b> | <b>59</b> | <b>1640</b> | <b>146</b>                  | <b>10</b> | <b>152</b> | <b>308</b> | <b>66</b>                   | <b>22</b> | <b>42</b> | <b>130</b> |
| <b>Willow Springs Townhomes</b>                       | <b>0</b>                       | <b>6</b>    | <b>0</b>  | <b>6</b>    | <b>0</b>                       | <b>5</b>    | <b>0</b>  | <b>5</b>    | <b>0</b>                    | <b>0</b>  | <b>0</b>   | <b>0</b>   | <b>0</b>                    | <b>0</b>  | <b>0</b>  | <b>0</b>   |
| Lanier Tract Senior Living Residential New Trips      | 0                              | 67          | 0         | 67          | 0                              | 44          | 0         | 44          | 0                           | 0         | 0          | 0          | 0                           | 0         | 0         | 0          |
| Lanier Tract Office/Retail New Trips                  | 0                              | 8           | 0         | 8           | 0                              | 14          | 0         | 14          | 0                           | 0         | 0          | 0          | 0                           | 0         | 0         | 0          |
| <b>Total Lanier Tract Site Trips</b>                  | <b>0</b>                       | <b>75</b>   | <b>0</b>  | <b>75</b>   | <b>0</b>                       | <b>58</b>   | <b>0</b>  | <b>58</b>   | <b>0</b>                    | <b>0</b>  | <b>0</b>   | <b>0</b>   | <b>0</b>                    | <b>0</b>  | <b>0</b>  | <b>0</b>   |
| <b>Phase 1 Future Volumes</b>                         | <b>274</b>                     | <b>2012</b> | <b>77</b> | <b>2363</b> | <b>44</b>                      | <b>1600</b> | <b>59</b> | <b>1703</b> | <b>146</b>                  | <b>10</b> | <b>152</b> | <b>308</b> | <b>66</b>                   | <b>22</b> | <b>42</b> | <b>130</b> |
| Retail Outparcels                                     | 0                              | 47          | 0         | 47          | 0                              | 50          | 0         | 50          | 0                           | 0         | 0          | 0          | 0                           | 0         | 0         | 0          |
| <b>Phase 2 Future Volumes</b>                         | <b>274</b>                     | <b>2059</b> | <b>77</b> | <b>2410</b> | <b>44</b>                      | <b>1650</b> | <b>59</b> | <b>1753</b> | <b>146</b>                  | <b>10</b> | <b>152</b> | <b>308</b> | <b>66</b>                   | <b>22</b> | <b>42</b> | <b>130</b> |

**MARC R. ACAMPORA, PE, LLC**

**Lanier Tract Multi-Use DRI Traffic Impact Study**  
City of Gainesville, Georgia

April 2017

**Intersection 10: Dawsonville Highway at Shallowford Road / Commercial Access**

| Weekday A.M. Peak Hour                               | Northbound Dawsonville Highway |       |       |     | Southbound Dawsonville Highway |       |       |      | Eastbound Shallowford Road |       |       |     | Westbound Commercial Access |       |       |     |
|------------------------------------------------------|--------------------------------|-------|-------|-----|--------------------------------|-------|-------|------|----------------------------|-------|-------|-----|-----------------------------|-------|-------|-----|
|                                                      | L                              | T     | R     | Tot | L                              | T     | R     | Tot  | L                          | T     | R     | Tot | L                           | T     | R     | Tot |
| <b>Counted Volumes (Thursday, November 17, 2016)</b> | 10                             | 738   | 13    | 761 | 1                              | 1249  | 338   | 1588 | 138                        | 2     | 8     | 148 | 2                           | 4     | 3     | 9   |
| Annual Background Growth                             | 10.4%                          | 10.4% | 10.4% |     | 10.4%                          | 10.4% | 10.4% |      | 10.4%                      | 10.4% | 10.4% |     | 10.4%                       | 10.4% | 10.4% |     |
| <b>No-Build Volumes</b>                              | 11                             | 815   | 14    | 840 | 1                              | 1379  | 373   | 1753 | 152                        | 2     | 9     | 163 | 2                           | 4     | 3     | 10  |
| <b>Willow Springs Townhomes</b>                      | 0                              | 2     | 0     | 2   | 0                              | 4     | 2     | 6    | 1                          | 0     | 0     | 1   | 0                           | 0     | 0     | 0   |
| Lanier Tract Senior Living Residential New Trips     | 0                              | 21    | 0     | 21  | 0                              | 30    | 10    | 40   | 6                          | 0     | 0     | 6   | 0                           | 0     | 0     | 0   |
| Lanier Tract Office/Retail New Trips                 | 0                              | 9     | 0     | 9   | 0                              | 2     | 1     | 3    | 1                          | 0     | 0     | 1   | 0                           | 0     | 0     | 0   |
| <b>Total Lanier Tract Site Trips</b>                 | 0                              | 30    | 0     | 30  | 0                              | 32    | 11    | 43   | 7                          | 0     | 0     | 7   | 0                           | 0     | 0     | 0   |
| <b>Phase 1 Future Volumes</b>                        | 11                             | 847   | 14    | 872 | 1                              | 1415  | 386   | 1802 | 160                        | 2     | 9     | 171 | 2                           | 4     | 3     | 10  |
| Retail Outparcels                                    | 0                              | 17    | 0     | 17  | 0                              | 10    | 1     | 11   | 2                          | 0     | 0     | 0   | 0                           | 0     | 0     | 0   |
| <b>Phase 2 Future Volumes</b>                        | 11                             | 864   | 14    | 889 | 1                              | 1425  | 387   | 1813 | 162                        | 2     | 9     | 173 | 2                           | 4     | 3     | 10  |

| Weekday P.M. Peak Hour                                | Northbound Dawsonville Highway |       |       |      | Southbound Dawsonville Highway |       |       |      | Eastbound Shallowford Road |       |       |     | Westbound Commercial Access |       |       |     |
|-------------------------------------------------------|--------------------------------|-------|-------|------|--------------------------------|-------|-------|------|----------------------------|-------|-------|-----|-----------------------------|-------|-------|-----|
|                                                       | L                              | T     | R     | Tot  | L                              | T     | R     | Tot  | L                          | T     | R     | Tot | L                           | T     | R     | Tot |
| <b>Counted Volumes (Thursday, September 17, 2015)</b> | 40                             | 1639  | 114   | 1793 | 7                              | 1161  | 463   | 1631 | 518                        | 38    | 26    | 582 | 36                          | 27    | 7     | 70  |
| Annual Background Growth                              | 10.4%                          | 10.4% | 10.4% |      | 10.4%                          | 10.4% | 10.4% |      | 10.4%                      | 10.4% | 10.4% |     | 10.4%                       | 10.4% | 10.4% |     |
| <b>No-Build Volumes</b>                               | 44                             | 1810  | 126   | 1980 | 8                              | 1282  | 511   | 1801 | 572                        | 42    | 29    | 643 | 40                          | 30    | 8     | 77  |
| <b>Willow Springs Townhomes</b>                       | 0                              | 4     | 0     | 4    | 0                              | 4     | 1     | 5    | 2                          | 0     | 0     | 2   | 0                           | 0     | 0     | 0   |
| Lanier Tract Senior Living Residential New Trips      | 0                              | 52    | 0     | 52   | 0                              | 33    | 11    | 44   | 15                         | 0     | 0     | 15  | 0                           | 0     | 0     | 0   |
| Lanier Tract Office/Retail New Trips                  | 0                              | 7     | 0     | 7    | 0                              | 12    | 2     | 14   | 1                          | 0     | 0     | 1   | 0                           | 0     | 0     | 0   |
| <b>Total Lanier Tract Site Trips</b>                  | 0                              | 59    | 0     | 59   | 0                              | 45    | 13    | 58   | 16                         | 0     | 0     | 16  | 0                           | 0     | 0     | 0   |
| <b>Phase 1 Future Volumes</b>                         | 44                             | 1873  | 126   | 2043 | 8                              | 1331  | 525   | 1864 | 590                        | 42    | 29    | 661 | 40                          | 30    | 8     | 77  |
| Retail Outparcels                                     | 0                              | 41    | 0     | 41   | 0                              | 44    | 6     | 50   | 6                          | 0     | 0     | 0   | 0                           | 0     | 0     | 0   |
| <b>Phase 2 Future Volumes</b>                         | 44                             | 1914  | 126   | 2084 | 8                              | 1375  | 531   | 1914 | 596                        | 42    | 29    | 667 | 40                          | 30    | 8     | 77  |

**MARC R. ACAMPORA, PE, LLC**

# Reliable Traffic Data Services, LLC

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info@reliabletraffic.org | www.reliabletraffic.org

TMC Data  
Sportsman Club Rd @ Strickland Dr  
Gainesville, GA  
7-9am I 4.30-6.30pm

File Name : 39520001  
Site Code : 39520001  
Start Date : 11/17/2016  
Page No : 1

## Groups Printed- Cars, Buses, Trucks

|               | Sportsman Club Rd Northbound |      |       |      |            | Sportsman Club Rd Southbound |      |       |      |            | Eastbound |      |       |      |            | Strickland Dr Westbound |      |       |      |            |            |
|---------------|------------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|-----------|------|-------|------|------------|-------------------------|------|-------|------|------------|------------|
| Start Time    | Left                         | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Left      | Thru | Right | Peds | App. Total | Left                    | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 0                            | 4    | 0     | 0    | 4          | 0                            | 7    | 0     | 0    | 7          | 0         | 0    | 0     | 0    | 0          | 0                       | 0    | 0     | 0    | 0          | 11         |
| 07:15 AM      | 0                            | 1    | 0     | 0    | 1          | 0                            | 4    | 0     | 0    | 4          | 0         | 0    | 0     | 0    | 0          | 1                       | 0    | 0     | 0    | 1          | 6          |
| 07:30 AM      | 0                            | 3    | 0     | 0    | 3          | 0                            | 6    | 0     | 0    | 6          | 0         | 0    | 0     | 0    | 0          | 2                       | 0    | 0     | 0    | 2          | 11         |
| 07:45 AM      | 0                            | 2    | 0     | 0    | 2          | 0                            | 3    | 0     | 0    | 3          | 0         | 0    | 0     | 0    | 0          | 2                       | 0    | 0     | 0    | 2          | 7          |
| Total         | 0                            | 10   | 0     | 0    | 10         | 0                            | 20   | 0     | 0    | 20         | 0         | 0    | 0     | 0    | 0          | 5                       | 0    | 0     | 0    | 5          | 35         |
| 08:00 AM      | 0                            | 0    | 1     | 0    | 1          | 0                            | 9    | 0     | 0    | 9          | 0         | 0    | 0     | 0    | 0          | 5                       | 0    | 0     | 0    | 5          | 15         |
| 08:15 AM      | 0                            | 1    | 0     | 0    | 1          | 0                            | 5    | 0     | 0    | 5          | 0         | 0    | 0     | 0    | 0          | 1                       | 0    | 0     | 0    | 1          | 7          |
| 08:30 AM      | 0                            | 0    | 2     | 0    | 2          | 0                            | 0    | 0     | 0    | 0          | 0         | 0    | 0     | 0    | 0          | 0                       | 0    | 0     | 0    | 0          | 2          |
| 08:45 AM      | 0                            | 2    | 3     | 0    | 5          | 0                            | 4    | 0     | 0    | 4          | 0         | 0    | 0     | 0    | 0          | 1                       | 0    | 0     | 0    | 1          | 10         |
| Total         | 0                            | 3    | 6     | 0    | 9          | 0                            | 18   | 0     | 0    | 18         | 0         | 0    | 0     | 0    | 0          | 7                       | 0    | 0     | 0    | 7          | 34         |
| *** BREAK *** |                              |      |       |      |            |                              |      |       |      |            |           |      |       |      |            |                         |      |       |      |            |            |
| 04:30 PM      | 0                            | 4    | 0     | 0    | 4          | 0                            | 4    | 0     | 0    | 4          | 0         | 0    | 0     | 0    | 0          | 0                       | 0    | 0     | 0    | 0          | 8          |
| 04:45 PM      | 0                            | 3    | 1     | 0    | 4          | 0                            | 8    | 0     | 0    | 8          | 0         | 0    | 0     | 0    | 0          | 0                       | 0    | 0     | 0    | 0          | 12         |
| Total         | 0                            | 7    | 1     | 0    | 8          | 0                            | 12   | 0     | 0    | 12         | 0         | 0    | 0     | 0    | 0          | 0                       | 0    | 0     | 0    | 0          | 20         |
| 05:00 PM      | 0                            | 6    | 1     | 0    | 7          | 0                            | 4    | 0     | 0    | 4          | 0         | 0    | 0     | 0    | 0          | 1                       | 0    | 0     | 0    | 1          | 12         |
| 05:15 PM      | 0                            | 4    | 5     | 0    | 9          | 0                            | 7    | 0     | 0    | 7          | 0         | 0    | 0     | 0    | 0          | 4                       | 0    | 0     | 0    | 4          | 20         |
| 05:30 PM      | 0                            | 10   | 1     | 0    | 11         | 0                            | 4    | 0     | 0    | 4          | 0         | 0    | 0     | 0    | 0          | 3                       | 0    | 0     | 0    | 3          | 18         |
| 05:45 PM      | 0                            | 6    | 1     | 0    | 7          | 0                            | 7    | 0     | 0    | 7          | 0         | 0    | 0     | 0    | 0          | 0                       | 0    | 0     | 0    | 0          | 14         |
| Total         | 0                            | 26   | 8     | 0    | 34         | 0                            | 22   | 0     | 0    | 22         | 0         | 0    | 0     | 0    | 0          | 8                       | 0    | 0     | 0    | 8          | 64         |
| 06:00 PM      | 0                            | 9    | 2     | 0    | 11         | 0                            | 5    | 0     | 0    | 5          | 0         | 0    | 0     | 0    | 0          | 0                       | 0    | 0     | 0    | 0          | 16         |
| 06:15 PM      | 0                            | 5    | 1     | 0    | 6          | 0                            | 6    | 0     | 0    | 6          | 0         | 0    | 0     | 0    | 0          | 2                       | 0    | 0     | 0    | 2          | 14         |
| Grand Total   | 0                            | 60   | 18    | 0    | 78         | 0                            | 83   | 0     | 0    | 83         | 0         | 0    | 0     | 0    | 0          | 22                      | 0    | 0     | 0    | 22         | 183        |
| Apprch %      | 0                            | 76.9 | 23.1  | 0    |            | 0                            | 100  | 0     | 0    |            | 0         | 0    | 0     | 0    |            | 100                     | 0    | 0     | 0    |            |            |
| Total %       | 0                            | 32.8 | 9.8   | 0    | 42.6       | 0                            | 45.4 | 0     | 0    | 45.4       | 0         | 0    | 0     | 0    | 0          | 12                      | 0    | 0     | 0    | 12         |            |

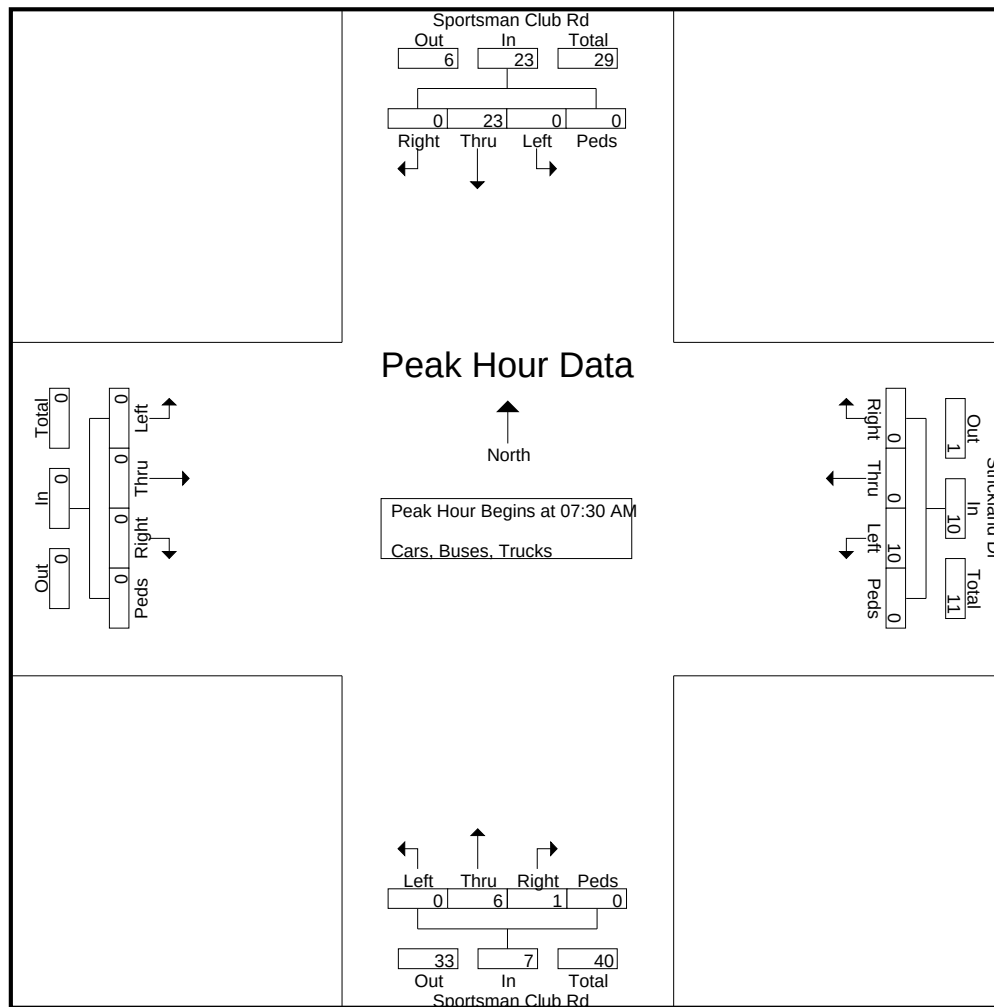
# Reliable Traffic Data Services, LLC

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TMC Data  
Sportsman Club Rd @ Strickland Dr  
Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520001  
Site Code : 39520001  
Start Date : 11/17/2016  
Page No : 2

|                                                            | Sportsman Club Rd Northbound |      |       |      |            | Sportsman Club Rd Southbound |      |       |      |            | Eastbound |      |       |      |            | Strickland Dr Westbound |      |       |      |            |            |
|------------------------------------------------------------|------------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|-----------|------|-------|------|------------|-------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                         | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Left      | Thru | Right | Peds | App. Total | Left                    | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                              |      |       |      |            |                              |      |       |      |            |           |      |       |      |            |                         |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                              |      |       |      |            |                              |      |       |      |            |           |      |       |      |            |                         |      |       |      |            |            |
| 07:30 AM                                                   | 0                            | 3    | 0     | 0    | 3          | 0                            | 6    | 0     | 0    | 6          | 0         | 0    | 0     | 0    | 0          | 2                       | 0    | 0     | 0    | 2          | 11         |
| 07:45 AM                                                   | 0                            | 2    | 0     | 0    | 2          | 0                            | 3    | 0     | 0    | 3          | 0         | 0    | 0     | 0    | 0          | 2                       | 0    | 0     | 0    | 2          | 7          |
| 08:00 AM                                                   | 0                            | 0    | 1     | 0    | 1          | 0                            | 9    | 0     | 0    | 9          | 0         | 0    | 0     | 0    | 0          | 5                       | 0    | 0     | 0    | 5          | 15         |
| 08:15 AM                                                   | 0                            | 1    | 0     | 0    | 1          | 0                            | 5    | 0     | 0    | 5          | 0         | 0    | 0     | 0    | 0          | 1                       | 0    | 0     | 0    | 1          | 7          |
| Total Volume                                               | 0                            | 6    | 1     | 0    | 7          | 0                            | 23   | 0     | 0    | 23         | 0         | 0    | 0     | 0    | 0          | 10                      | 0    | 0     | 0    | 10         | 40         |
| % App. Total                                               | 0                            | 85.7 | 14.3  | 0    |            | 0                            | 100  | 0     | 0    |            | 0         | 0    | 0     | 0    |            | 100                     | 0    | 0     | 0    |            |            |
| PHF                                                        | .000                         | .500 | .250  | .000 | .583       | .000                         | .639 | .000  | .000 | .639       | .000      | .000 | .000  | .000 | .000       | .500                    | .000 | .000  | .000 | .500       | .667       |



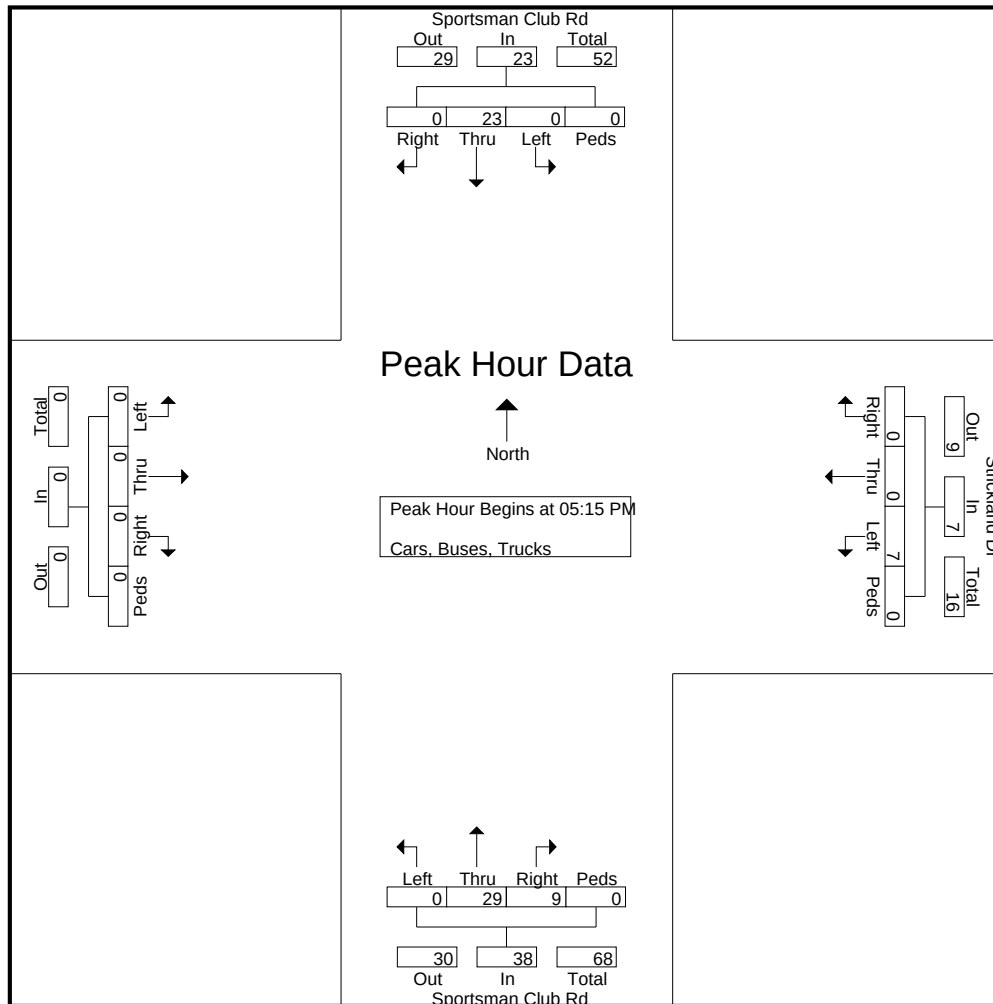
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TMC Data  
Sportsman Club Rd @ Strickland Dr  
Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520001  
Site Code : 39520001  
Start Date : 11/17/2016  
Page No : 3

|                                                            | Sportsman Club Rd Northbound |      |       |      |            | Sportsman Club Rd Southbound |      |       |      |            | Eastbound |      |       |      |            | Strickland Dr Westbound |      |       |      |            |            |
|------------------------------------------------------------|------------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|-----------|------|-------|------|------------|-------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                         | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Left      | Thru | Right | Peds | App. Total | Left                    | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1 |                              |      |       |      |            |                              |      |       |      |            |           |      |       |      |            |                         |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 05:15 PM       |                              |      |       |      |            |                              |      |       |      |            |           |      |       |      |            |                         |      |       |      |            |            |
| 05:15 PM                                                   | 0                            | 4    | 5     | 0    | 9          | 0                            | 7    | 0     | 0    | 7          | 0         | 0    | 0     | 0    | 0          | 4                       | 0    | 0     | 0    | 4          | 20         |
| 05:30 PM                                                   | 0                            | 10   | 1     | 0    | 11         | 0                            | 4    | 0     | 0    | 4          | 0         | 0    | 0     | 0    | 0          | 3                       | 0    | 0     | 0    | 3          | 18         |
| 05:45 PM                                                   | 0                            | 6    | 1     | 0    | 7          | 0                            | 7    | 0     | 0    | 7          | 0         | 0    | 0     | 0    | 0          | 0                       | 0    | 0     | 0    | 0          | 14         |
| 06:00 PM                                                   | 0                            | 9    | 2     | 0    | 11         | 0                            | 5    | 0     | 0    | 5          | 0         | 0    | 0     | 0    | 0          | 0                       | 0    | 0     | 0    | 0          | 16         |
| Total Volume                                               | 0                            | 29   | 9     | 0    | 38         | 0                            | 23   | 0     | 0    | 23         | 0         | 0    | 0     | 0    | 0          | 7                       | 0    | 0     | 0    | 7          | 68         |
| % App. Total                                               | 0                            | 76.3 | 23.7  | 0    |            | 0                            | 100  | 0     | 0    |            | 0         | 0    | 0     | 0    |            | 100                     | 0    | 0     | 0    |            |            |
| PHF                                                        | .000                         | .725 | .450  | .000 | .864       | .000                         | .821 | .000  | .000 | .821       | .000      | .000 | .000  | .000 | .000       | .438                    | .000 | .000  | .000 | .438       | .850       |





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TMC Data  
Dawsonville Hwy (SR53) @  
Sportsman Club Rd, Gainesville, GA  
7-9am I 4.30-6.30pm

File Name : 39520002  
Site Code : 39520002  
Start Date : 11/17/2016  
Page No : 1

## Groups Printed- Cars, Buses, Trucks

|               | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Truck Turn Around<br>Eastbound |      |       |      |            | Sportsman Club Rd<br>Westbound |      |       |      |            |            |
|---------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|--------------------------------|------|-------|------|------------|--------------------------------|------|-------|------|------------|------------|
| Start Time    | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                           | Thru | Right | Peds | App. Total | Left                           | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 0                                    | 156  | 4     | 0    | 160        | 1                                    | 326  | 0     | 0    | 327        | 0                              | 0    | 0     | 0    | 0          | 5                              | 0    | 4     | 0    | 9          | 496        |
| 07:15 AM      | 0                                    | 165  | 2     | 0    | 167        | 4                                    | 391  | 0     | 0    | 395        | 0                              | 0    | 0     | 0    | 0          | 3                              | 0    | 6     | 0    | 9          | 571        |
| 07:30 AM      | 0                                    | 168  | 2     | 0    | 170        | 4                                    | 492  | 0     | 0    | 496        | 0                              | 0    | 0     | 0    | 0          | 6                              | 0    | 2     | 0    | 8          | 674        |
| 07:45 AM      | 0                                    | 189  | 1     | 0    | 190        | 1                                    | 448  | 0     | 0    | 449        | 0                              | 0    | 0     | 0    | 0          | 4                              | 0    | 2     | 0    | 6          | 645        |
| Total         | 0                                    | 678  | 9     | 0    | 687        | 10                                   | 1657 | 0     | 0    | 1667       | 0                              | 0    | 0     | 0    | 0          | 18                             | 0    | 14    | 0    | 32         | 2386       |
| 08:00 AM      | 0                                    | 221  | 3     | 0    | 224        | 0                                    | 356  | 0     | 0    | 356        | 0                              | 0    | 0     | 0    | 0          | 12                             | 0    | 5     | 0    | 17         | 597        |
| 08:15 AM      | 0                                    | 175  | 3     | 0    | 178        | 1                                    | 364  | 0     | 0    | 365        | 0                              | 0    | 0     | 0    | 0          | 4                              | 0    | 1     | 0    | 5          | 548        |
| 08:30 AM      | 2                                    | 192  | 3     | 0    | 197        | 1                                    | 320  | 2     | 0    | 323        | 0                              | 0    | 0     | 0    | 0          | 1                              | 0    | 1     | 0    | 2          | 522        |
| 08:45 AM      | 1                                    | 164  | 4     | 0    | 169        | 3                                    | 267  | 0     | 0    | 270        | 0                              | 0    | 0     | 0    | 0          | 8                              | 0    | 0     | 0    | 8          | 447        |
| Total         | 3                                    | 752  | 13    | 0    | 768        | 5                                    | 1307 | 2     | 0    | 1314       | 0                              | 0    | 0     | 0    | 0          | 25                             | 0    | 7     | 0    | 32         | 2114       |
| *** BREAK *** |                                      |      |       |      |            |                                      |      |       |      |            |                                |      |       |      |            |                                |      |       |      |            |            |
| 04:30 PM      | 0                                    | 344  | 9     | 0    | 353        | 1                                    | 258  | 0     | 0    | 259        | 0                              | 0    | 0     | 0    | 0          | 4                              | 0    | 1     | 0    | 5          | 617        |
| 04:45 PM      | 0                                    | 411  | 3     | 0    | 414        | 1                                    | 239  | 0     | 0    | 240        | 0                              | 0    | 0     | 0    | 0          | 8                              | 0    | 2     | 0    | 10         | 664        |
| Total         | 0                                    | 755  | 12    | 0    | 767        | 2                                    | 497  | 0     | 0    | 499        | 0                              | 0    | 0     | 0    | 0          | 12                             | 0    | 3     | 0    | 15         | 1281       |
| 05:00 PM      | 2                                    | 410  | 3     | 0    | 415        | 6                                    | 271  | 0     | 0    | 277        | 0                              | 0    | 0     | 0    | 0          | 4                              | 0    | 2     | 0    | 6          | 698        |
| 05:15 PM      | 0                                    | 437  | 6     | 0    | 443        | 4                                    | 267  | 0     | 0    | 271        | 0                              | 0    | 0     | 0    | 0          | 10                             | 0    | 4     | 0    | 14         | 728        |
| 05:30 PM      | 0                                    | 413  | 7     | 0    | 420        | 4                                    | 262  | 0     | 0    | 266        | 0                              | 0    | 0     | 0    | 0          | 6                              | 0    | 1     | 0    | 7          | 693        |
| 05:45 PM      | 0                                    | 374  | 5     | 0    | 379        | 3                                    | 267  | 0     | 0    | 270        | 0                              | 0    | 0     | 0    | 0          | 6                              | 0    | 3     | 0    | 9          | 658        |
| Total         | 2                                    | 1634 | 21    | 0    | 1657       | 17                                   | 1067 | 0     | 0    | 1084       | 0                              | 0    | 0     | 0    | 0          | 26                             | 0    | 10    | 0    | 36         | 2777       |
| 06:00 PM      | 1                                    | 421  | 12    | 0    | 434        | 0                                    | 250  | 0     | 0    | 250        | 0                              | 0    | 0     | 0    | 0          | 6                              | 0    | 1     | 0    | 7          | 691        |
| 06:15 PM      | 0                                    | 318  | 7     | 0    | 325        | 3                                    | 252  | 0     | 0    | 255        | 0                              | 0    | 0     | 0    | 0          | 7                              | 0    | 3     | 0    | 10         | 590        |
| Grand Total   | 6                                    | 4558 | 74    | 0    | 4638       | 37                                   | 5030 | 2     | 0    | 5069       | 0                              | 0    | 0     | 0    | 0          | 94                             | 0    | 38    | 0    | 132        | 9839       |
| Apprch %      | 0.1                                  | 98.3 | 1.6   | 0    |            | 0.7                                  | 99.2 | 0     | 0    |            | 0                              | 0    | 0     | 0    |            | 71.2                           | 0    | 28.8  | 0    |            |            |
| Total %       | 0.1                                  | 46.3 | 0.8   | 0    | 47.1       | 0.4                                  | 51.1 | 0     | 0    | 51.5       | 0                              | 0    | 0     | 0    |            | 1                              | 0    | 0.4   | 0    | 1.3        |            |

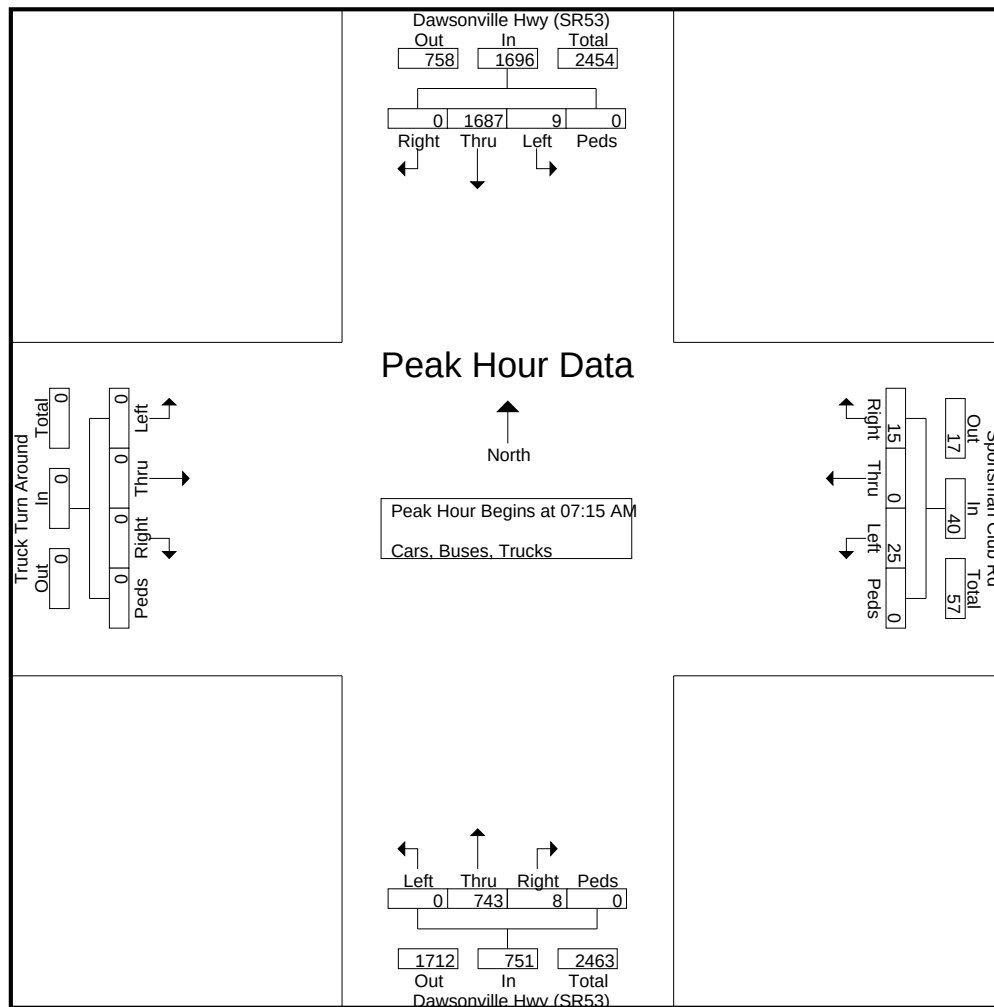
# Reliable Traffic Data Services, LLC

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TMC Data  
Dawsonville Hwy (SR53) @  
Sportsman Club Rd, Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520002  
Site Code : 39520002  
Start Date : 11/17/2016  
Page No : 2

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Truck Turn Around<br>Eastbound |      |       |      |            | Sportsman Club Rd<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|--------------------------------|------|-------|------|------------|--------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                           | Thru | Right | Peds | App. Total | Left                           | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                                |      |       |      |            |                                |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:15 AM       |                                      |      |       |      |            |                                      |      |       |      |            |                                |      |       |      |            |                                |      |       |      |            |            |
| 07:15 AM                                                   | 0                                    | 165  | 2     | 0    | 167        | 4                                    | 391  | 0     | 0    | 395        | 0                              | 0    | 0     | 0    | 0          | 3                              | 0    | 6     | 0    | 9          | 571        |
| 07:30 AM                                                   | 0                                    | 168  | 2     | 0    | 170        | 4                                    | 492  | 0     | 0    | 496        | 0                              | 0    | 0     | 0    | 0          | 6                              | 0    | 2     | 0    | 8          | 674        |
| 07:45 AM                                                   | 0                                    | 189  | 1     | 0    | 190        | 1                                    | 448  | 0     | 0    | 449        | 0                              | 0    | 0     | 0    | 0          | 4                              | 0    | 2     | 0    | 6          | 645        |
| 08:00 AM                                                   | 0                                    | 221  | 3     | 0    | 224        | 0                                    | 356  | 0     | 0    | 356        | 0                              | 0    | 0     | 0    | 0          | 12                             | 0    | 5     | 0    | 17         | 597        |
| Total Volume                                               | 0                                    | 743  | 8     | 0    | 751        | 9                                    | 1687 | 0     | 0    | 1696       | 0                              | 0    | 0     | 0    | 0          | 25                             | 0    | 15    | 0    | 40         | 2487       |
| % App. Total                                               | 0                                    | 98.9 | 1.1   | 0    |            | 0.5                                  | 99.5 | 0     | 0    |            | 0                              | 0    | 0     | 0    |            | 62.5                           | 0    | 37.5  | 0    |            |            |
| PHF                                                        | .000                                 | .840 | .667  | .000 | .838       | .563                                 | .857 | .000  | .000 | .855       | .000                           | .000 | .000  | .000 | .000       | .521                           | .000 | .625  | .000 | .588       | .922       |



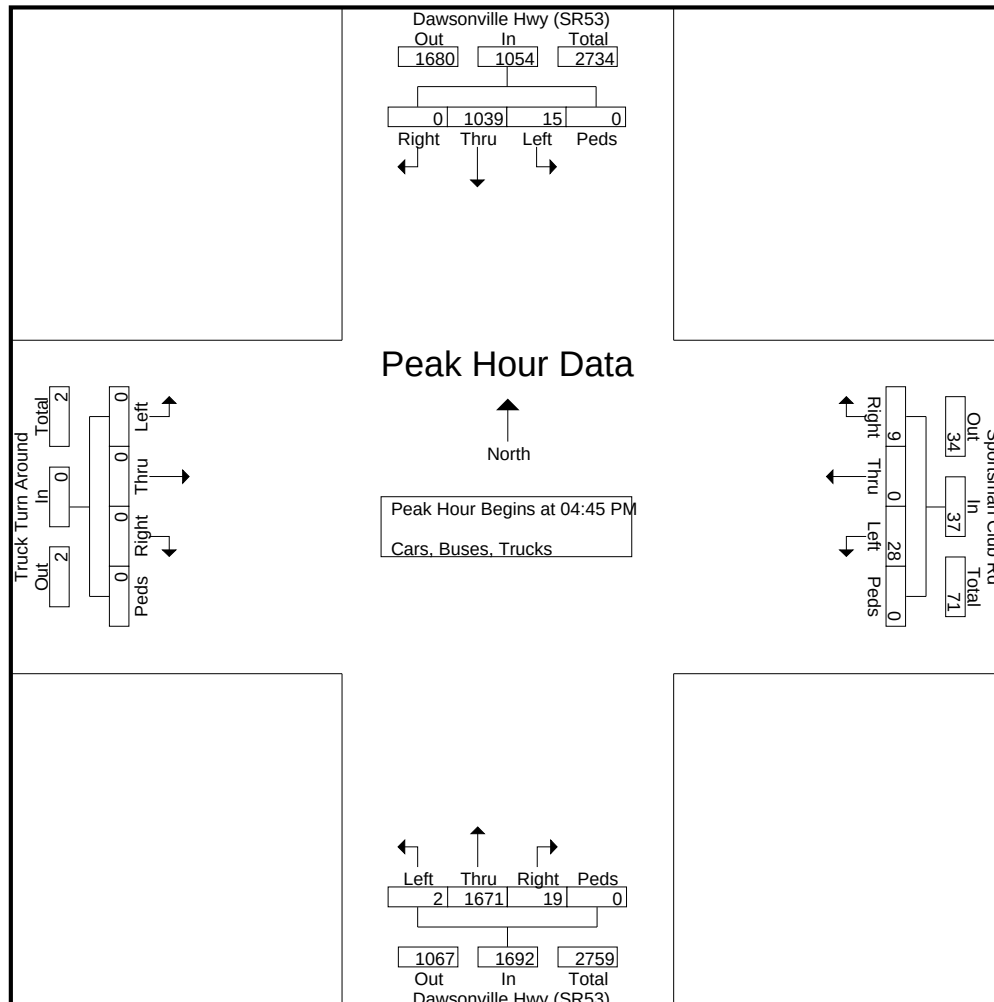
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TMC Data  
Dawsonville Hwy (SR53) @  
Sportsman Club Rd, Gainesville, GA  
7-9am I 4.30-6.30pm

File Name : 39520002  
Site Code : 39520002  
Start Date : 11/17/2016  
Page No : 3

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Truck Turn Around<br>Eastbound |      |       |      |            | Sportsman Club Rd<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|--------------------------------|------|-------|------|------------|--------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                           | Thru | Right | Peds | App. Total | Left                           | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                                |      |       |      |            |                                |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 04:45 PM       |                                      |      |       |      |            |                                      |      |       |      |            |                                |      |       |      |            |                                |      |       |      |            |            |
| 04:45 PM                                                   | 0                                    | 411  | 3     | 0    | 414        | 1                                    | 239  | 0     | 0    | 240        | 0                              | 0    | 0     | 0    | 0          | 8                              | 0    | 2     | 0    | 10         | 664        |
| 05:00 PM                                                   | 2                                    | 410  | 3     | 0    | 415        | 6                                    | 271  | 0     | 0    | 277        | 0                              | 0    | 0     | 0    | 0          | 4                              | 0    | 2     | 0    | 6          | 698        |
| 05:15 PM                                                   | 0                                    | 437  | 6     | 0    | 443        | 4                                    | 267  | 0     | 0    | 271        | 0                              | 0    | 0     | 0    | 0          | 10                             | 0    | 4     | 0    | 14         | 728        |
| 05:30 PM                                                   | 0                                    | 413  | 7     | 0    | 420        | 4                                    | 262  | 0     | 0    | 266        | 0                              | 0    | 0     | 0    | 0          | 6                              | 0    | 1     | 0    | 7          | 693        |
| Total Volume                                               | 2                                    | 1671 | 19    | 0    | 1692       | 15                                   | 1039 | 0     | 0    | 1054       | 0                              | 0    | 0     | 0    | 0          | 28                             | 0    | 9     | 0    | 37         | 2783       |
| % App. Total                                               | 0.1                                  | 98.8 | 1.1   | 0    |            | 1.4                                  | 98.6 | 0     | 0    |            | 0                              | 0    | 0     | 0    |            | 75.7                           | 0    | 24.3  | 0    |            |            |
| PHF                                                        | .250                                 | .956 | .679  | .000 | .955       | .625                                 | .958 | .000  | .000 | .951       | .000                           | .000 | .000  | .000 | .000       | .700                           | .000 | .563  | .000 | .661       | .956       |



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TMC Data  
Dawsonville Hwy (SR53) @ Avonlea Way  
Gainesville, GA  
7-9am I 4.30-6.30pm

File Name : 39520003  
Site Code : 39520003  
Start Date : 11/17/2016  
Page No : 1

## Groups Printed- Cars, Buses, Trucks

|               | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Avonlea Way<br>Eastbound |      |       |      |            | Residential Drwy<br>Westbound |      |       |      |            |            |
|---------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|--------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|------------|
| Start Time    | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                     | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 3                                    | 160  | 0     | 0    | 163        | 0                                    | 324  | 0     | 0    | 324        | 6                        | 0    | 18    | 0    | 24         | 0                             | 0    | 0     | 0    | 0          | 511        |
| 07:15 AM      | 2                                    | 162  | 1     | 0    | 165        | 0                                    | 381  | 0     | 0    | 381        | 6                        | 0    | 25    | 0    | 31         | 1                             | 0    | 0     | 0    | 1          | 578        |
| 07:30 AM      | 6                                    | 164  | 1     | 0    | 171        | 0                                    | 485  | 2     | 0    | 487        | 2                        | 0    | 22    | 0    | 24         | 0                             | 0    | 0     | 0    | 0          | 682        |
| 07:45 AM      | 2                                    | 193  | 0     | 0    | 195        | 0                                    | 442  | 1     | 0    | 443        | 7                        | 0    | 19    | 0    | 26         | 0                             | 0    | 0     | 0    | 0          | 664        |
| Total         | 13                                   | 679  | 2     | 0    | 694        | 0                                    | 1632 | 3     | 0    | 1635       | 21                       | 0    | 84    | 0    | 105        | 1                             | 0    | 0     | 0    | 1          | 2435       |
| 08:00 AM      | 2                                    | 216  | 0     | 0    | 218        | 0                                    | 367  | 1     | 0    | 368        | 4                        | 0    | 15    | 0    | 19         | 0                             | 0    | 0     | 0    | 0          | 605        |
| 08:15 AM      | 2                                    | 184  | 0     | 0    | 186        | 0                                    | 374  | 2     | 0    | 376        | 2                        | 0    | 16    | 0    | 18         | 0                             | 0    | 0     | 0    | 0          | 580        |
| 08:30 AM      | 4                                    | 198  | 0     | 0    | 202        | 0                                    | 326  | 3     | 0    | 329        | 3                        | 0    | 21    | 0    | 24         | 0                             | 0    | 0     | 0    | 0          | 555        |
| 08:45 AM      | 3                                    | 167  | 0     | 0    | 170        | 0                                    | 278  | 2     | 0    | 280        | 2                        | 0    | 14    | 0    | 16         | 0                             | 0    | 0     | 0    | 0          | 466        |
| Total         | 11                                   | 765  | 0     | 0    | 776        | 0                                    | 1345 | 8     | 0    | 1353       | 11                       | 0    | 66    | 0    | 77         | 0                             | 0    | 0     | 0    | 0          | 2206       |
| *** BREAK *** |                                      |      |       |      |            |                                      |      |       |      |            |                          |      |       |      |            |                               |      |       |      |            |            |
| 04:30 PM      | 14                                   | 351  | 0     | 0    | 365        | 0                                    | 267  | 3     | 0    | 270        | 0                        | 0    | 9     | 0    | 9          | 0                             | 0    | 0     | 0    | 0          | 644        |
| 04:45 PM      | 10                                   | 412  | 0     | 0    | 422        | 0                                    | 248  | 6     | 0    | 254        | 1                        | 0    | 6     | 0    | 7          | 0                             | 0    | 0     | 0    | 0          | 683        |
| Total         | 24                                   | 763  | 0     | 0    | 787        | 0                                    | 515  | 9     | 0    | 524        | 1                        | 0    | 15    | 0    | 16         | 0                             | 0    | 0     | 0    | 0          | 1327       |
| 05:00 PM      | 21                                   | 416  | 0     | 0    | 437        | 0                                    | 273  | 4     | 0    | 277        | 7                        | 0    | 9     | 0    | 16         | 0                             | 0    | 0     | 0    | 0          | 730        |
| 05:15 PM      | 10                                   | 442  | 0     | 0    | 452        | 0                                    | 279  | 2     | 0    | 281        | 1                        | 0    | 18    | 0    | 19         | 0                             | 0    | 0     | 0    | 0          | 752        |
| 05:30 PM      | 13                                   | 418  | 0     | 0    | 431        | 1                                    | 272  | 6     | 0    | 279        | 0                        | 0    | 9     | 0    | 9          | 0                             | 0    | 0     | 0    | 0          | 719        |
| 05:45 PM      | 18                                   | 374  | 0     | 0    | 392        | 1                                    | 278  | 2     | 0    | 281        | 3                        | 0    | 11    | 0    | 14         | 0                             | 0    | 0     | 0    | 0          | 687        |
| Total         | 62                                   | 1650 | 0     | 0    | 1712       | 2                                    | 1102 | 14    | 0    | 1118       | 11                       | 0    | 47    | 0    | 58         | 0                             | 0    | 0     | 0    | 0          | 2888       |
| 06:00 PM      | 21                                   | 420  | 0     | 0    | 441        | 1                                    | 256  | 4     | 0    | 261        | 3                        | 0    | 12    | 0    | 15         | 0                             | 0    | 0     | 0    | 0          | 717        |
| 06:15 PM      | 13                                   | 328  | 0     | 0    | 341        | 0                                    | 247  | 3     | 0    | 250        | 1                        | 0    | 10    | 0    | 11         | 0                             | 0    | 0     | 0    | 0          | 602        |
| Grand Total   | 144                                  | 4605 | 2     | 0    | 4751       | 3                                    | 5097 | 41    | 0    | 5141       | 48                       | 0    | 234   | 0    | 282        | 1                             | 0    | 0     | 0    | 1          | 10175      |
| Apprch %      | 3                                    | 96.9 | 0     | 0    |            | 0.1                                  | 99.1 | 0.8   | 0    |            | 17                       | 0    | 83    | 0    |            | 100                           | 0    | 0     | 0    |            |            |
| Total %       | 1.4                                  | 45.3 | 0     | 0    | 46.7       | 0                                    | 50.1 | 0.4   | 0    | 50.5       | 0.5                      | 0    | 2.3   | 0    | 2.8        | 0                             | 0    | 0     | 0    | 0          |            |

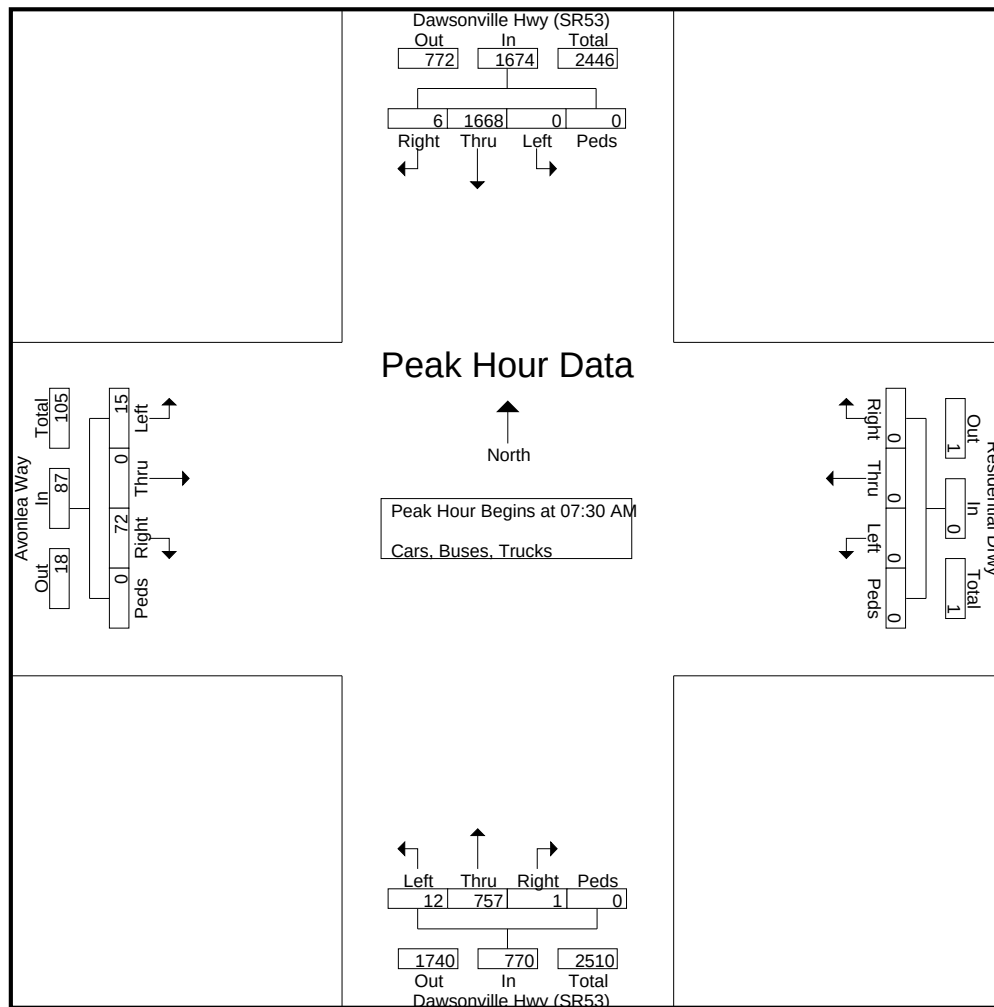
# Reliable Traffic Data Services, LLC

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TMC Data  
Dawsonville Hwy (SR53) @ Avonlea Way  
Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520003  
Site Code : 39520003  
Start Date : 11/17/2016  
Page No : 2

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Avonlea Way<br>Eastbound |      |       |      |            | Residential Drwy<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|--------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                     | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                          |      |       |      |            |                               |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                                      |      |       |      |            |                                      |      |       |      |            |                          |      |       |      |            |                               |      |       |      |            |            |
| 07:30 AM                                                   | 6                                    | 164  | 1     | 0    | 171        | 0                                    | 485  | 2     | 0    | 487        | 2                        | 0    | 22    | 0    | 24         | 0                             | 0    | 0     | 0    | 0          | 682        |
| 07:45 AM                                                   | 2                                    | 193  | 0     | 0    | 195        | 0                                    | 442  | 1     | 0    | 443        | 7                        | 0    | 19    | 0    | 26         | 0                             | 0    | 0     | 0    | 0          | 664        |
| 08:00 AM                                                   | 2                                    | 216  | 0     | 0    | 218        | 0                                    | 367  | 1     | 0    | 368        | 4                        | 0    | 15    | 0    | 19         | 0                             | 0    | 0     | 0    | 0          | 605        |
| 08:15 AM                                                   | 2                                    | 184  | 0     | 0    | 186        | 0                                    | 374  | 2     | 0    | 376        | 2                        | 0    | 16    | 0    | 18         | 0                             | 0    | 0     | 0    | 0          | 580        |
| Total Volume                                               | 12                                   | 757  | 1     | 0    | 770        | 0                                    | 1668 | 6     | 0    | 1674       | 15                       | 0    | 72    | 0    | 87         | 0                             | 0    | 0     | 0    | 0          | 2531       |
| % App. Total                                               | 1.6                                  | 98.3 | 0.1   | 0    |            | 0                                    | 99.6 | 0.4   | 0    |            | 17.2                     | 0    | 82.8  | 0    |            | 0                             | 0    | 0     | 0    |            |            |
| PHF                                                        | .500                                 | .876 | .250  | .000 | .883       | .000                                 | .860 | .750  | .000 | .859       | .536                     | .000 | .818  | .000 | .837       | .000                          | .000 | .000  | .000 | .000       | .928       |



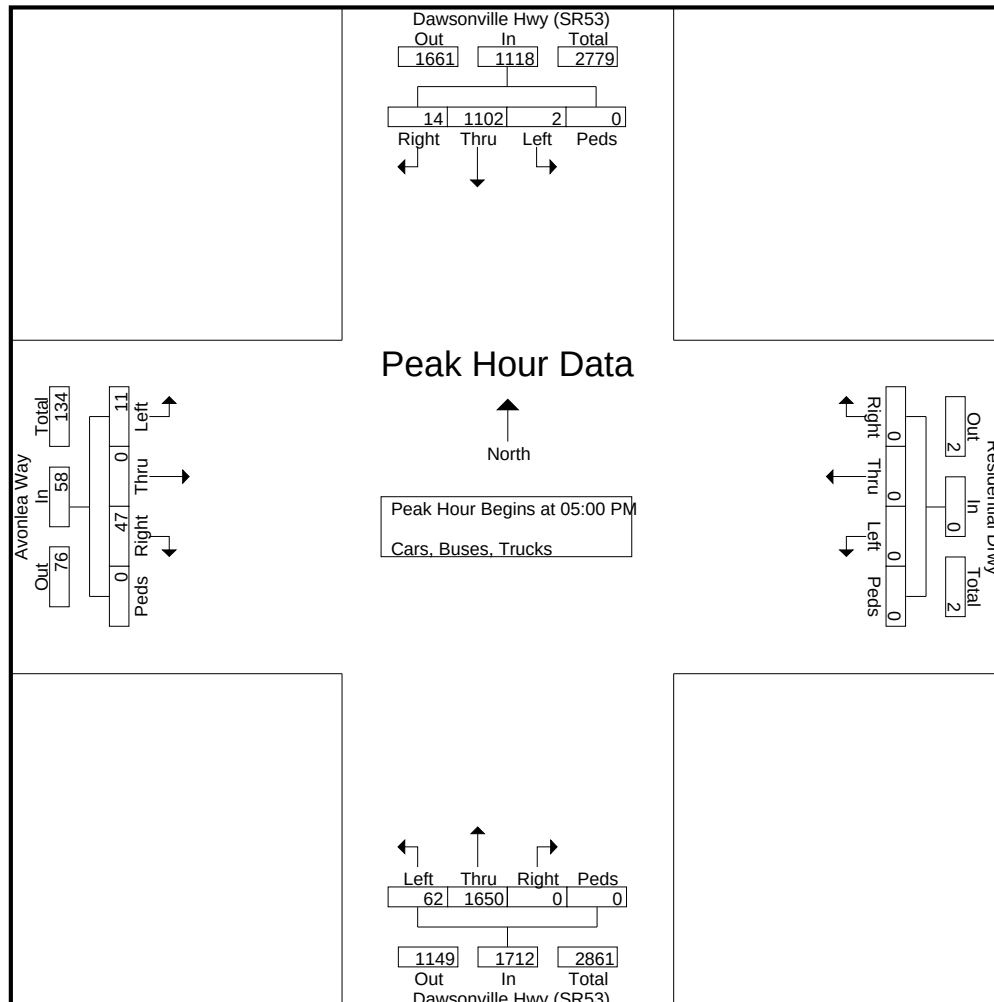
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TMC Data  
Dawsonville Hwy (SR53) @ Avonlea Way  
Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520003  
Site Code : 39520003  
Start Date : 11/17/2016  
Page No : 3

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Avonlea Way<br>Eastbound |      |       |      |            | Residential Drwy<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|--------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                     | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                          |      |       |      |            |                               |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                                      |      |       |      |            |                                      |      |       |      |            |                          |      |       |      |            |                               |      |       |      |            |            |
| 05:00 PM                                                   | 21                                   | 416  | 0     | 0    | 437        | 0                                    | 273  | 4     | 0    | 277        | 7                        | 0    | 9     | 0    | 16         | 0                             | 0    | 0     | 0    | 0          | 730        |
| 05:15 PM                                                   | 10                                   | 442  | 0     | 0    | 452        | 0                                    | 279  | 2     | 0    | 281        | 1                        | 0    | 18    | 0    | 19         | 0                             | 0    | 0     | 0    | 0          | 752        |
| 05:30 PM                                                   | 13                                   | 418  | 0     | 0    | 431        | 1                                    | 272  | 6     | 0    | 279        | 0                        | 0    | 9     | 0    | 9          | 0                             | 0    | 0     | 0    | 0          | 719        |
| 05:45 PM                                                   | 18                                   | 374  | 0     | 0    | 392        | 1                                    | 278  | 2     | 0    | 281        | 3                        | 0    | 11    | 0    | 14         | 0                             | 0    | 0     | 0    | 0          | 687        |
| Total Volume                                               | 62                                   | 1650 | 0     | 0    | 1712       | 2                                    | 1102 | 14    | 0    | 1118       | 11                       | 0    | 47    | 0    | 58         | 0                             | 0    | 0     | 0    | 0          | 2888       |
| % App. Total                                               | 3.6                                  | 96.4 | 0     | 0    |            | 0.2                                  | 98.6 | 1.3   | 0    |            | 19                       | 0    | 81    | 0    |            | 0                             | 0    | 0     | 0    |            |            |
| PHF                                                        | .738                                 | .933 | .000  | .000 | .947       | .500                                 | .987 | .583  | .000 | .995       | .393                     | .000 | .653  | .000 | .763       | .000                          | .000 | .000  | .000 | .000       | .960       |



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TMC Data  
Dawsonville Hwy (SR53) @ Canterbury Rd  
Gainesville, GA  
7-9am I 4.30-6.30pm

File Name : 39520004  
Site Code : 39520004  
Start Date : 11/17/2016  
Page No : 1

## Groups Printed- Cars, Buses, Trucks

|               | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |         |            | Canterbury Rd<br>Eastbound |      |       |      |            | Westbound |      |       |      |            |            |
|---------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|---------|------------|----------------------------|------|-------|------|------------|-----------|------|-------|------|------------|------------|
| Start Time    | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | U-Turns | App. Total | Left                       | Thru | Right | Peds | App. Total | Left      | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 4                                    | 151  | 0     | 0    | 155        | 0                                    | 342  | 2     | 0       | 344        | 5                          | 0    | 22    | 0    | 27         | 0         | 0    | 0     | 0    | 0          | 526        |
| 07:15 AM      | 7                                    | 160  | 0     | 0    | 167        | 0                                    | 456  | 1     | 0       | 457        | 3                          | 0    | 29    | 0    | 32         | 0         | 0    | 0     | 0    | 0          | 656        |
| 07:30 AM      | 6                                    | 168  | 0     | 0    | 174        | 0                                    | 487  | 4     | 0       | 491        | 5                          | 0    | 23    | 0    | 28         | 0         | 0    | 0     | 0    | 0          | 693        |
| 07:45 AM      | 7                                    | 180  | 0     | 0    | 187        | 0                                    | 436  | 1     | 1       | 438        | 4                          | 0    | 27    | 0    | 31         | 0         | 0    | 0     | 0    | 0          | 656        |
| Total         | 24                                   | 659  | 0     | 0    | 683        | 0                                    | 1721 | 8     | 1       | 1730       | 17                         | 0    | 101   | 0    | 118        | 0         | 0    | 0     | 0    | 0          | 2531       |
| 08:00 AM      | 3                                    | 214  | 0     | 0    | 217        | 0                                    | 403  | 1     | 0       | 404        | 6                          | 0    | 16    | 0    | 22         | 0         | 0    | 0     | 0    | 0          | 643        |
| 08:15 AM      | 8                                    | 178  | 0     | 0    | 186        | 0                                    | 392  | 3     | 0       | 395        | 3                          | 0    | 18    | 0    | 21         | 0         | 0    | 0     | 0    | 0          | 602        |
| 08:30 AM      | 3                                    | 180  | 0     | 0    | 183        | 0                                    | 326  | 2     | 2       | 330        | 3                          | 0    | 11    | 0    | 14         | 0         | 0    | 0     | 0    | 0          | 527        |
| 08:45 AM      | 7                                    | 164  | 0     | 0    | 171        | 0                                    | 297  | 0     | 0       | 297        | 2                          | 0    | 8     | 0    | 10         | 0         | 0    | 0     | 0    | 0          | 478        |
| Total         | 21                                   | 736  | 0     | 0    | 757        | 0                                    | 1418 | 6     | 2       | 1426       | 14                         | 0    | 53    | 0    | 67         | 0         | 0    | 0     | 0    | 0          | 2250       |
| *** BREAK *** |                                      |      |       |      |            |                                      |      |       |         |            |                            |      |       |      |            |           |      |       |      |            |            |
| 04:30 PM      | 22                                   | 367  | 0     | 0    | 389        | 0                                    | 263  | 4     | 1       | 268        | 2                          | 0    | 13    | 0    | 15         | 0         | 0    | 0     | 0    | 0          | 672        |
| 04:45 PM      | 25                                   | 398  | 0     | 0    | 423        | 0                                    | 267  | 1     | 1       | 269        | 1                          | 0    | 16    | 0    | 17         | 0         | 0    | 0     | 0    | 0          | 709        |
| Total         | 47                                   | 765  | 0     | 0    | 812        | 0                                    | 530  | 5     | 2       | 537        | 3                          | 0    | 29    | 0    | 32         | 0         | 0    | 0     | 0    | 0          | 1381       |
| 05:00 PM      | 21                                   | 426  | 0     | 0    | 447        | 0                                    | 271  | 1     | 1       | 273        | 3                          | 0    | 8     | 0    | 11         | 0         | 0    | 0     | 0    | 0          | 731        |
| 05:15 PM      | 33                                   | 432  | 0     | 0    | 465        | 0                                    | 278  | 3     | 0       | 281        | 2                          | 0    | 4     | 0    | 6          | 0         | 0    | 0     | 0    | 0          | 752        |
| 05:30 PM      | 26                                   | 418  | 0     | 0    | 444        | 0                                    | 272  | 5     | 0       | 277        | 1                          | 0    | 7     | 0    | 8          | 0         | 0    | 0     | 0    | 0          | 729        |
| 05:45 PM      | 31                                   | 406  | 0     | 0    | 437        | 0                                    | 284  | 5     | 2       | 291        | 1                          | 0    | 9     | 0    | 10         | 0         | 0    | 0     | 0    | 0          | 738        |
| Total         | 111                                  | 1682 | 0     | 0    | 1793       | 0                                    | 1105 | 14    | 3       | 1122       | 7                          | 0    | 28    | 0    | 35         | 0         | 0    | 0     | 0    | 0          | 2950       |
| 06:00 PM      | 26                                   | 387  | 0     | 0    | 413        | 0                                    | 278  | 7     | 0       | 285        | 1                          | 0    | 16    | 0    | 17         | 0         | 0    | 0     | 0    | 0          | 715        |
| 06:15 PM      | 23                                   | 364  | 0     | 0    | 387        | 0                                    | 267  | 5     | 0       | 272        | 2                          | 0    | 11    | 0    | 13         | 0         | 0    | 0     | 0    | 0          | 672        |
| Grand Total   | 252                                  | 4593 | 0     | 0    | 4845       | 0                                    | 5319 | 45    | 8       | 5372       | 44                         | 0    | 238   | 0    | 282        | 0         | 0    | 0     | 0    | 0          | 10499      |
| Apprch %      | 5.2                                  | 94.8 | 0     | 0    |            | 0                                    | 99   | 0.8   | 0.1     |            | 15.6                       | 0    | 84.4  | 0    |            | 0         | 0    | 0     | 0    |            |            |
| Total %       | 2.4                                  | 43.7 | 0     | 0    | 46.1       | 0                                    | 50.7 | 0.4   | 0.1     | 51.2       | 0.4                        | 0    | 2.3   | 0    | 2.7        | 0         | 0    | 0     | 0    | 0          |            |



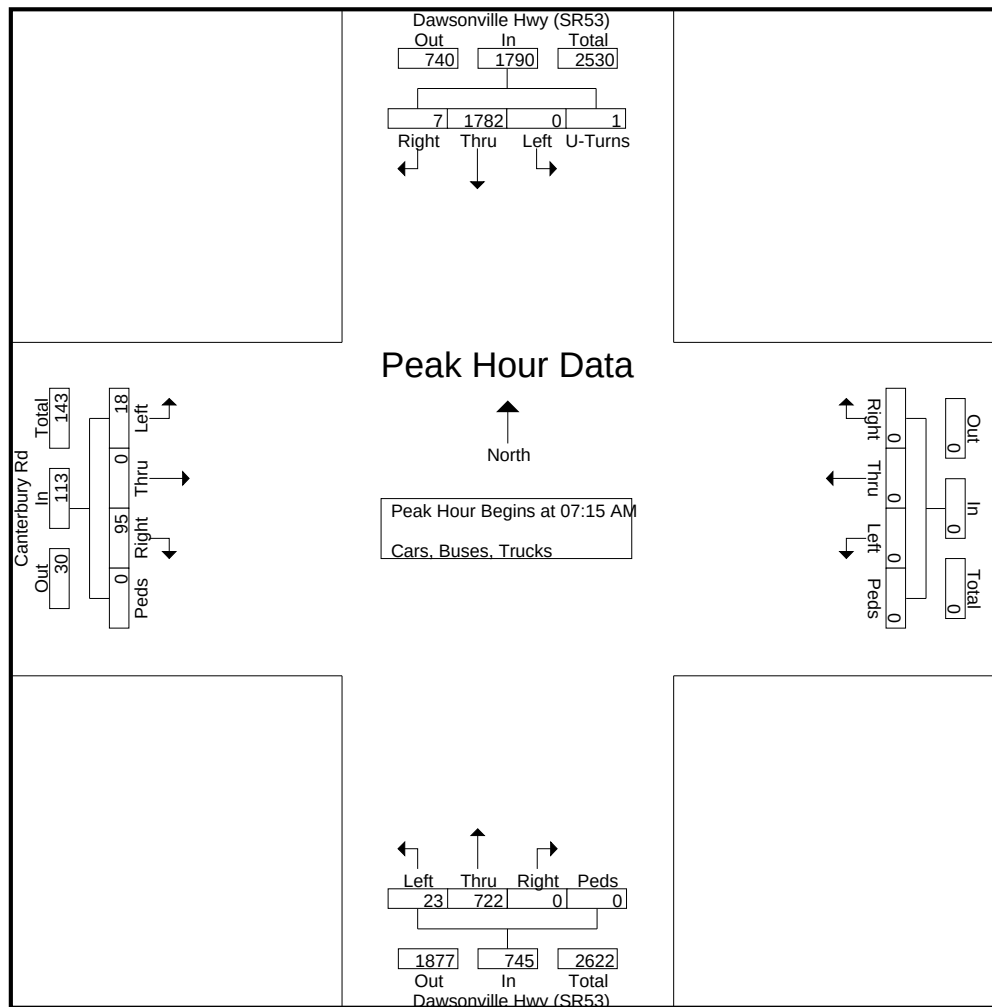
# Reliable Traffic Data Services, LLC

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TMC Data  
Dawsonville Hwy (SR53) @ Canterbury Rd  
Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520004  
Site Code : 39520004  
Start Date : 11/17/2016  
Page No : 2

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |         |            | Canterbury Rd<br>Eastbound |      |       |      |            | Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|---------|------------|----------------------------|------|-------|------|------------|-----------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | U-Turns | App. Total | Left                       | Thru | Right | Peds | App. Total | Left      | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |         |            |                            |      |       |      |            |           |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:15 AM       |                                      |      |       |      |            |                                      |      |       |         |            |                            |      |       |      |            |           |      |       |      |            |            |
| 07:15 AM                                                   | 7                                    | 160  | 0     | 0    | 167        | 0                                    | 456  | 1     | 0       | 457        | 3                          | 0    | 29    | 0    | 32         | 0         | 0    | 0     | 0    | 0          | 656        |
| 07:30 AM                                                   | 6                                    | 168  | 0     | 0    | 174        | 0                                    | 487  | 4     | 0       | 491        | 5                          | 0    | 23    | 0    | 28         | 0         | 0    | 0     | 0    | 0          | 693        |
| 07:45 AM                                                   | 7                                    | 180  | 0     | 0    | 187        | 0                                    | 436  | 1     | 1       | 438        | 4                          | 0    | 27    | 0    | 31         | 0         | 0    | 0     | 0    | 0          | 656        |
| 08:00 AM                                                   | 3                                    | 214  | 0     | 0    | 217        | 0                                    | 403  | 1     | 0       | 404        | 6                          | 0    | 16    | 0    | 22         | 0         | 0    | 0     | 0    | 0          | 643        |
| Total Volume                                               | 23                                   | 722  | 0     | 0    | 745        | 0                                    | 1782 | 7     | 1       | 1790       | 18                         | 0    | 95    | 0    | 113        | 0         | 0    | 0     | 0    | 0          | 2648       |
| % App. Total                                               | 3.1                                  | 96.9 | 0     | 0    |            | 0                                    | 99.6 | 0.4   | 0.1     |            | 15.9                       | 0    | 84.1  | 0    |            | 0         | 0    | 0     | 0    |            |            |
| PHF                                                        | .821                                 | .843 | .000  | .000 | .858       | .000                                 | .915 | .438  | .250    | .911       | .750                       | .000 | .819  | .000 | .883       | .000      | .000 | .000  | .000 | .000       | .955       |



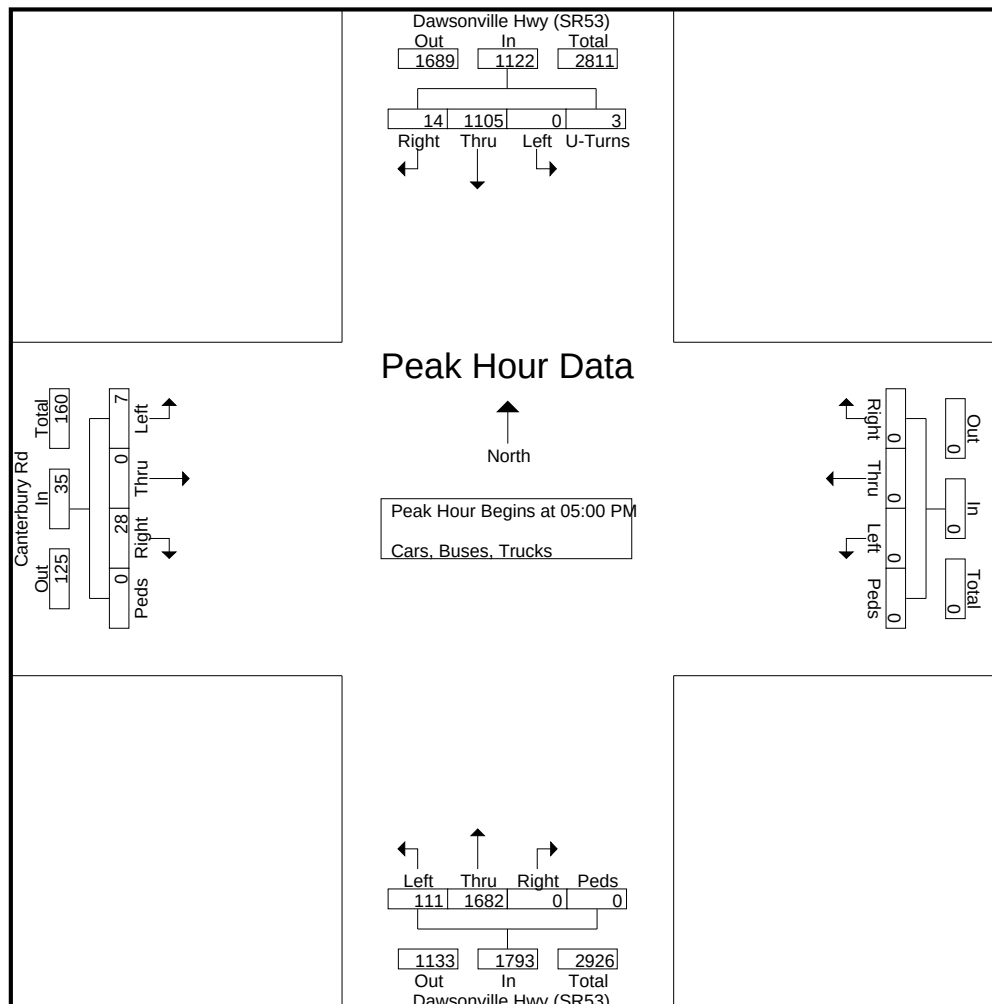
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TMC Data  
Dawsonville Hwy (SR53) @ Canterbury Rd  
Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520004  
Site Code : 39520004  
Start Date : 11/17/2016  
Page No : 3

|                                                            | Dawsonville Hwy (SR53) Northbound |      |       |      |            | Dawsonville Hwy (SR53) Southbound |      |       |         |            | Canterbury Rd Eastbound |      |       |      |            | Westbound |      |       |      |            |            |
|------------------------------------------------------------|-----------------------------------|------|-------|------|------------|-----------------------------------|------|-------|---------|------------|-------------------------|------|-------|------|------------|-----------|------|-------|------|------------|------------|
| Start Time                                                 | Left                              | Thru | Right | Peds | App. Total | Left                              | Thru | Right | U-Turns | App. Total | Left                    | Thru | Right | Peds | App. Total | Left      | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1 |                                   |      |       |      |            |                                   |      |       |         |            |                         |      |       |      |            |           |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                                   |      |       |      |            |                                   |      |       |         |            |                         |      |       |      |            |           |      |       |      |            |            |
| 05:00 PM                                                   | 21                                | 426  | 0     | 0    | 447        | 0                                 | 271  | 1     | 1       | 273        | 3                       | 0    | 8     | 0    | 11         | 0         | 0    | 0     | 0    | 0          | 731        |
| 05:15 PM                                                   | 33                                | 432  | 0     | 0    | 465        | 0                                 | 278  | 3     | 0       | 281        | 2                       | 0    | 4     | 0    | 6          | 0         | 0    | 0     | 0    | 0          | 752        |
| 05:30 PM                                                   | 26                                | 418  | 0     | 0    | 444        | 0                                 | 272  | 5     | 0       | 277        | 1                       | 0    | 7     | 0    | 8          | 0         | 0    | 0     | 0    | 0          | 729        |
| 05:45 PM                                                   | 31                                | 406  | 0     | 0    | 437        | 0                                 | 284  | 5     | 2       | 291        | 1                       | 0    | 9     | 0    | 10         | 0         | 0    | 0     | 0    | 0          | 738        |
| Total Volume                                               | 111                               | 1682 | 0     | 0    | 1793       | 0                                 | 1105 | 14    | 3       | 1122       | 7                       | 0    | 28    | 0    | 35         | 0         | 0    | 0     | 0    | 0          | 2950       |
| % App. Total                                               | 6.2                               | 93.8 | 0     | 0    |            | 0                                 | 98.5 | 1.2   | 0.3     |            | 20                      | 0    | 80    | 0    |            | 0         | 0    | 0     | 0    |            |            |
| PHF                                                        | .841                              | .973 | .000  | .000 | .964       | .000                              | .973 | .700  | .375    | .964       | .583                    | .000 | .778  | .000 | .795       | .000      | .000 | .000  | .000 | .000       | .981       |



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TMC Data  
Dawsonville Hwy (SR53) @ Ahaluna Dr/  
Lanier Valley Dr, Gainesville, GA  
7-9am I 4.30-6.30pm

File Name : 39520005  
Site Code : 39520005  
Start Date : 11/17/2016  
Page No : 1

## Groups Printed- Cars, Buses, Trucks

|               | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Lanier Valley Dr<br>Eastbound |      |       |      |            | Ahaluna Dr<br>Westbound |      |       |      |            |            |
|---------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|-------------------------|------|-------|------|------------|------------|
| Start Time    | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Left                    | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 8                                    | 146  | 2     | 0    | 156        | 4                                    | 335  | 0     | 0    | 339        | 2                             | 0    | 18    | 0    | 20         | 10                      | 2    | 4     | 0    | 16         | 531        |
| 07:15 AM      | 8                                    | 158  | 3     | 0    | 169        | 4                                    | 461  | 0     | 0    | 465        | 4                             | 0    | 31    | 0    | 35         | 10                      | 1    | 6     | 0    | 17         | 686        |
| 07:30 AM      | 16                                   | 159  | 5     | 0    | 180        | 7                                    | 542  | 0     | 0    | 549        | 5                             | 1    | 32    | 0    | 38         | 13                      | 0    | 5     | 0    | 18         | 785        |
| 07:45 AM      | 17                                   | 173  | 2     | 0    | 192        | 1                                    | 506  | 0     | 0    | 507        | 5                             | 2    | 29    | 0    | 36         | 5                       | 2    | 4     | 0    | 11         | 746        |
| Total         | 49                                   | 636  | 12    | 0    | 697        | 16                                   | 1844 | 0     | 0    | 1860       | 16                            | 3    | 110   | 0    | 129        | 38                      | 5    | 19    | 0    | 62         | 2748       |
| 08:00 AM      | 14                                   | 211  | 1     | 0    | 226        | 2                                    | 392  | 0     | 0    | 394        | 5                             | 2    | 23    | 0    | 30         | 9                       | 0    | 5     | 0    | 14         | 664        |
| 08:15 AM      | 13                                   | 161  | 4     | 0    | 178        | 5                                    | 424  | 0     | 0    | 429        | 3                             | 0    | 17    | 0    | 20         | 5                       | 4    | 3     | 0    | 12         | 639        |
| 08:30 AM      | 13                                   | 176  | 2     | 0    | 191        | 3                                    | 348  | 1     | 0    | 352        | 6                             | 0    | 17    | 0    | 23         | 3                       | 1    | 8     | 0    | 12         | 578        |
| 08:45 AM      | 7                                    | 175  | 1     | 0    | 183        | 3                                    | 312  | 1     | 0    | 316        | 5                             | 1    | 29    | 0    | 35         | 4                       | 1    | 5     | 0    | 10         | 544        |
| Total         | 47                                   | 723  | 8     | 0    | 778        | 13                                   | 1476 | 2     | 0    | 1491       | 19                            | 3    | 86    | 0    | 108        | 21                      | 6    | 21    | 0    | 48         | 2425       |
| *** BREAK *** |                                      |      |       |      |            |                                      |      |       |      |            |                               |      |       |      |            |                         |      |       |      |            |            |
| 04:30 PM      | 23                                   | 377  | 7     | 0    | 407        | 9                                    | 270  | 1     | 0    | 280        | 9                             | 2    | 22    | 0    | 33         | 10                      | 3    | 12    | 0    | 25         | 745        |
| 04:45 PM      | 27                                   | 435  | 6     | 0    | 468        | 4                                    | 293  | 0     | 0    | 297        | 5                             | 0    | 24    | 0    | 29         | 8                       | 1    | 16    | 0    | 25         | 819        |
| Total         | 50                                   | 812  | 13    | 0    | 875        | 13                                   | 563  | 1     | 0    | 577        | 14                            | 2    | 46    | 0    | 62         | 18                      | 4    | 28    | 0    | 50         | 1564       |
| 05:00 PM      | 40                                   | 423  | 7     | 0    | 470        | 4                                    | 270  | 1     | 0    | 275        | 8                             | 0    | 21    | 0    | 29         | 7                       | 0    | 10    | 0    | 17         | 791        |
| 05:15 PM      | 48                                   | 436  | 10    | 0    | 494        | 8                                    | 306  | 0     | 0    | 314        | 5                             | 0    | 23    | 0    | 28         | 8                       | 3    | 14    | 0    | 25         | 861        |
| 05:30 PM      | 39                                   | 432  | 12    | 0    | 483        | 4                                    | 316  | 0     | 0    | 320        | 3                             | 0    | 25    | 0    | 28         | 14                      | 2    | 12    | 0    | 28         | 859        |
| 05:45 PM      | 52                                   | 446  | 9     | 0    | 507        | 6                                    | 309  | 2     | 0    | 317        | 5                             | 1    | 27    | 0    | 33         | 8                       | 2    | 15    | 0    | 25         | 882        |
| Total         | 179                                  | 1737 | 38    | 0    | 1954       | 22                                   | 1201 | 3     | 0    | 1226       | 21                            | 1    | 96    | 0    | 118        | 37                      | 7    | 51    | 0    | 95         | 3393       |
| 06:00 PM      | 38                                   | 392  | 6     | 0    | 436        | 6                                    | 247  | 2     | 0    | 255        | 2                             | 0    | 17    | 0    | 19         | 8                       | 1    | 17    | 0    | 26         | 736        |
| 06:15 PM      | 40                                   | 386  | 8     | 0    | 434        | 9                                    | 278  | 2     | 0    | 289        | 3                             | 0    | 17    | 0    | 20         | 9                       | 1    | 9     | 0    | 19         | 762        |
| Grand Total   | 403                                  | 4686 | 85    | 0    | 5174       | 79                                   | 5609 | 10    | 0    | 5698       | 75                            | 9    | 372   | 0    | 456        | 131                     | 24   | 145   | 0    | 300        | 11628      |
| Apprch %      | 7.8                                  | 90.6 | 1.6   | 0    |            | 1.4                                  | 98.4 | 0.2   | 0    |            | 16.4                          | 2    | 81.6  | 0    |            | 43.7                    | 8    | 48.3  | 0    |            |            |
| Total %       | 3.5                                  | 40.3 | 0.7   | 0    | 44.5       | 0.7                                  | 48.2 | 0.1   | 0    | 49         | 0.6                           | 0.1  | 3.2   | 0    | 3.9        | 1.1                     | 0.2  | 1.2   | 0    | 2.6        |            |

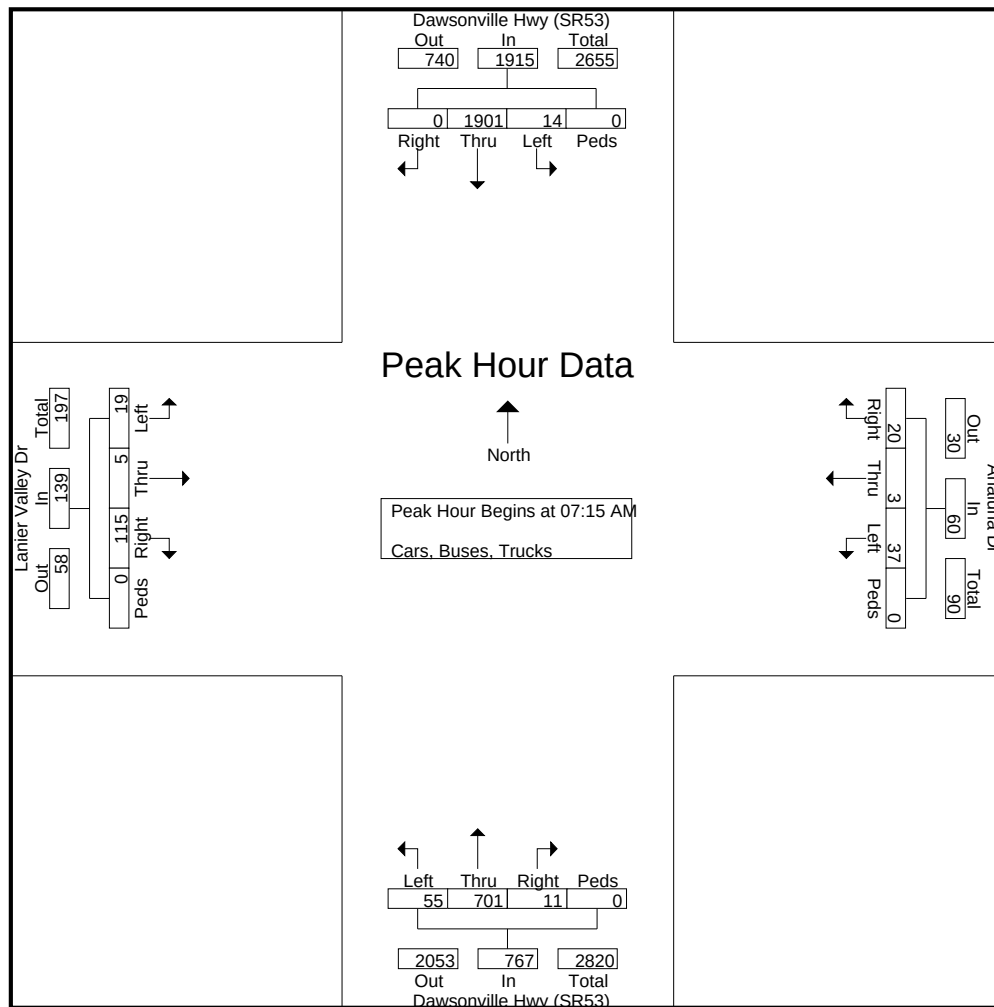
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TMC Data  
Dawsonville Hwy (SR53) @ Ahaluna Dr/  
Lanier Valley Dr, Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520005  
Site Code : 39520005  
Start Date : 11/17/2016  
Page No : 2

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Lanier Valley Dr<br>Eastbound |      |       |      |            | Ahaluna Dr<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|-------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Left                    | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                               |      |       |      |            |                         |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:15 AM       |                                      |      |       |      |            |                                      |      |       |      |            |                               |      |       |      |            |                         |      |       |      |            |            |
| 07:15 AM                                                   | 8                                    | 158  | 3     | 0    | 169        | 4                                    | 461  | 0     | 0    | 465        | 4                             | 0    | 31    | 0    | 35         | 10                      | 1    | 6     | 0    | 17         | 686        |
| 07:30 AM                                                   | 16                                   | 159  | 5     | 0    | 180        | 7                                    | 542  | 0     | 0    | 549        | 5                             | 1    | 32    | 0    | 38         | 13                      | 0    | 5     | 0    | 18         | 785        |
| 07:45 AM                                                   | 17                                   | 173  | 2     | 0    | 192        | 1                                    | 506  | 0     | 0    | 507        | 5                             | 2    | 29    | 0    | 36         | 5                       | 2    | 4     | 0    | 11         | 746        |
| 08:00 AM                                                   | 14                                   | 211  | 1     | 0    | 226        | 2                                    | 392  | 0     | 0    | 394        | 5                             | 2    | 23    | 0    | 30         | 9                       | 0    | 5     | 0    | 14         | 664        |
| Total Volume                                               | 55                                   | 701  | 11    | 0    | 767        | 14                                   | 1901 | 0     | 0    | 1915       | 19                            | 5    | 115   | 0    | 139        | 37                      | 3    | 20    | 0    | 60         | 2881       |
| % App. Total                                               | 7.2                                  | 91.4 | 1.4   | 0    |            | 0.7                                  | 99.3 | 0     | 0    |            | 13.7                          | 3.6  | 82.7  | 0    |            | 61.7                    | 5    | 33.3  | 0    |            |            |
| PHF                                                        | .809                                 | .831 | .550  | .000 | .848       | .500                                 | .877 | .000  | .000 | .872       | .950                          | .625 | .898  | .000 | .914       | .712                    | .375 | .833  | .000 | .833       | .918       |



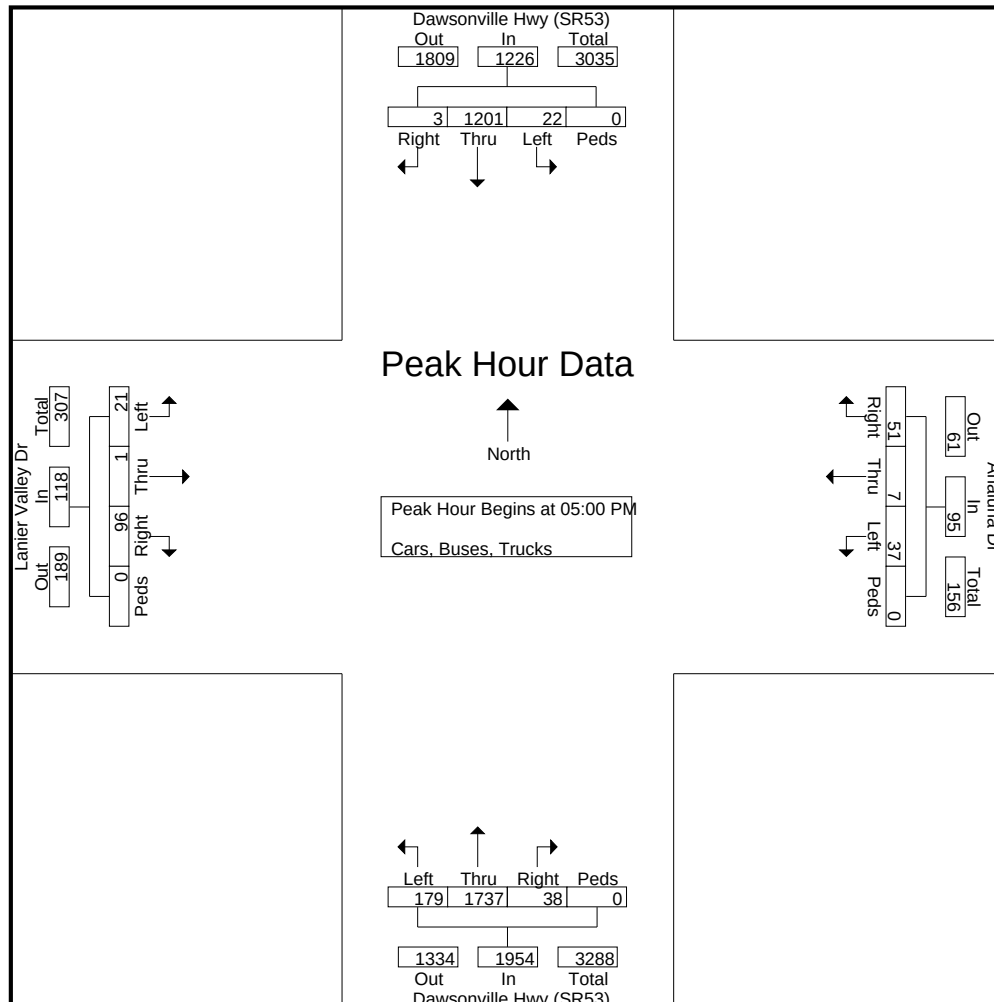
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TMC Data  
Dawsonville Hwy (SR53) @ Ahaluna Dr/  
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7-9am | 4.30-6.30pm

File Name : 39520005  
Site Code : 39520005  
Start Date : 11/17/2016  
Page No : 3

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Lanier Valley Dr<br>Eastbound |      |       |      |            | Ahaluna Dr<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|-------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Left                    | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                               |      |       |      |            |                         |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                                      |      |       |      |            |                                      |      |       |      |            |                               |      |       |      |            |                         |      |       |      |            |            |
| 05:00 PM                                                   | 40                                   | 423  | 7     | 0    | 470        | 4                                    | 270  | 1     | 0    | 275        | 8                             | 0    | 21    | 0    | 29         | 7                       | 0    | 10    | 0    | 17         | 791        |
| 05:15 PM                                                   | 48                                   | 436  | 10    | 0    | 494        | 8                                    | 306  | 0     | 0    | 314        | 5                             | 0    | 23    | 0    | 28         | 8                       | 3    | 14    | 0    | 25         | 861        |
| 05:30 PM                                                   | 39                                   | 432  | 12    | 0    | 483        | 4                                    | 316  | 0     | 0    | 320        | 3                             | 0    | 25    | 0    | 28         | 14                      | 2    | 12    | 0    | 28         | 859        |
| 05:45 PM                                                   | 52                                   | 446  | 9     | 0    | 507        | 6                                    | 309  | 2     | 0    | 317        | 5                             | 1    | 27    | 0    | 33         | 8                       | 2    | 15    | 0    | 25         | 882        |
| Total Volume                                               | 179                                  | 1737 | 38    | 0    | 1954       | 22                                   | 1201 | 3     | 0    | 1226       | 21                            | 1    | 96    | 0    | 118        | 37                      | 7    | 51    | 0    | 95         | 3393       |
| % App. Total                                               | 9.2                                  | 88.9 | 1.9   | 0    |            | 1.8                                  | 98   | 0.2   | 0    |            | 17.8                          | 0.8  | 81.4  | 0    |            | 38.9                    | 7.4  | 53.7  | 0    |            |            |
| PHF                                                        | .861                                 | .974 | .792  | .000 | .964       | .688                                 | .950 | .375  | .000 | .958       | .656                          | .250 | .889  | .000 | .894       | .661                    | .583 | .850  | .000 | .848       | .962       |



# Reliable Traffic Data Services, LLC

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TMC Data  
Dawsonville Hwy (SR53) @ North Lake  
Square Shopp Ctr Drwy, Gainesville, GA  
7-9am I 4-6pm

File Name : 40160001  
Site Code : 40160001  
Start Date : 3/22/2017  
Page No : 1

## Groups Printed- Cars, Buses, Trucks

|               | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Olive Garden/others Drwy<br>Eastbound |      |       |      |            | North Lake Square<br>Shopp Ctr Drwy<br>Westbound |      |       |      |            |            |
|---------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|---------------------------------------|------|-------|------|------------|--------------------------------------------------|------|-------|------|------------|------------|
| Start Time    | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                                  | Thru | Right | Peds | App. Total | Left                                             | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 1                                    | 155  | 4     | 0    | 160        | 1                                    | 367  | 0     | 0    | 368        | 1                                     | 0    | 1     | 0    | 2          | 0                                                | 0    | 0     | 0    | 0          | 530        |
| 07:15 AM      | 1                                    | 163  | 1     | 0    | 165        | 0                                    | 489  | 0     | 0    | 489        | 1                                     | 0    | 1     | 0    | 2          | 0                                                | 0    | 0     | 0    | 0          | 656        |
| 07:30 AM      | 4                                    | 174  | 1     | 0    | 179        | 1                                    | 552  | 0     | 0    | 553        | 1                                     | 0    | 2     | 0    | 3          | 0                                                | 0    | 0     | 0    | 0          | 735        |
| 07:45 AM      | 2                                    | 189  | 3     | 0    | 194        | 1                                    | 536  | 3     | 0    | 540        | 0                                     | 0    | 1     | 0    | 1          | 1                                                | 0    | 0     | 0    | 1          | 736        |
| Total         | 8                                    | 681  | 9     | 0    | 698        | 3                                    | 1944 | 3     | 0    | 1950       | 3                                     | 0    | 5     | 0    | 8          | 1                                                | 0    | 0     | 0    | 1          | 2657       |
| 08:00 AM      | 4                                    | 214  | 4     | 0    | 222        | 3                                    | 412  | 1     | 0    | 416        | 0                                     | 0    | 2     | 0    | 2          | 1                                                | 0    | 0     | 0    | 1          | 641        |
| 08:15 AM      | 2                                    | 206  | 2     | 0    | 210        | 1                                    | 429  | 3     | 0    | 433        | 1                                     | 0    | 1     | 0    | 2          | 0                                                | 0    | 0     | 0    | 0          | 645        |
| 08:30 AM      | 0                                    | 197  | 7     | 0    | 204        | 1                                    | 358  | 0     | 0    | 359        | 0                                     | 0    | 0     | 0    | 0          | 3                                                | 0    | 1     | 0    | 4          | 567        |
| 08:45 AM      | 3                                    | 185  | 8     | 0    | 196        | 1                                    | 337  | 1     | 0    | 339        | 0                                     | 0    | 3     | 0    | 3          | 3                                                | 0    | 2     | 0    | 5          | 543        |
| Total         | 9                                    | 802  | 21    | 0    | 832        | 6                                    | 1536 | 5     | 0    | 1547       | 1                                     | 0    | 6     | 0    | 7          | 7                                                | 0    | 3     | 0    | 10         | 2396       |
| *** BREAK *** |                                      |      |       |      |            |                                      |      |       |      |            |                                       |      |       |      |            |                                                  |      |       |      |            |            |
| 04:00 PM      | 12                                   | 376  | 29    | 0    | 417        | 7                                    | 274  | 2     | 0    | 283        | 1                                     | 1    | 12    | 0    | 14         | 28                                               | 0    | 9     | 0    | 37         | 751        |
| 04:15 PM      | 11                                   | 382  | 30    | 0    | 423        | 11                                   | 277  | 4     | 0    | 292        | 2                                     | 0    | 15    | 0    | 17         | 48                                               | 0    | 8     | 0    | 56         | 788        |
| 04:30 PM      | 19                                   | 396  | 38    | 0    | 453        | 8                                    | 285  | 5     | 0    | 298        | 2                                     | 2    | 6     | 0    | 10         | 30                                               | 0    | 11    | 0    | 41         | 802        |
| 04:45 PM      | 22                                   | 435  | 32    | 0    | 489        | 6                                    | 287  | 5     | 0    | 298        | 7                                     | 0    | 16    | 0    | 23         | 32                                               | 2    | 10    | 0    | 44         | 854        |
| Total         | 64                                   | 1589 | 129   | 0    | 1782       | 32                                   | 1123 | 16    | 0    | 1171       | 12                                    | 3    | 49    | 0    | 64         | 138                                              | 2    | 38    | 0    | 178        | 3195       |
| 05:00 PM      | 28                                   | 433  | 39    | 0    | 500        | 1                                    | 287  | 5     | 0    | 293        | 4                                     | 1    | 14    | 0    | 19         | 25                                               | 1    | 5     | 0    | 31         | 843        |
| 05:15 PM      | 18                                   | 439  | 24    | 0    | 481        | 6                                    | 296  | 7     | 0    | 309        | 3                                     | 2    | 12    | 0    | 17         | 31                                               | 2    | 11    | 0    | 44         | 851        |
| 05:30 PM      | 16                                   | 447  | 37    | 0    | 500        | 4                                    | 312  | 6     | 0    | 322        | 1                                     | 0    | 19    | 0    | 20         | 35                                               | 3    | 14    | 0    | 52         | 894        |
| 05:45 PM      | 25                                   | 444  | 38    | 0    | 507        | 8                                    | 304  | 9     | 0    | 321        | 5                                     | 0    | 15    | 0    | 20         | 27                                               | 1    | 12    | 0    | 40         | 888        |
| Total         | 87                                   | 1763 | 138   | 0    | 1988       | 19                                   | 1199 | 27    | 0    | 1245       | 13                                    | 3    | 60    | 0    | 76         | 118                                              | 7    | 42    | 0    | 167        | 3476       |
| Grand Total   | 168                                  | 4835 | 297   | 0    | 5300       | 60                                   | 5802 | 51    | 0    | 5913       | 29                                    | 6    | 120   | 0    | 155        | 264                                              | 9    | 83    | 0    | 356        | 11724      |
| Apprch %      | 3.2                                  | 91.2 | 5.6   | 0    |            | 1                                    | 98.1 | 0.9   | 0    |            | 18.7                                  | 3.9  | 77.4  | 0    |            | 74.2                                             | 2.5  | 23.3  | 0    |            |            |
| Total %       | 1.4                                  | 41.2 | 2.5   | 0    | 45.2       | 0.5                                  | 49.5 | 0.4   | 0    | 50.4       | 0.2                                   | 0.1  | 1     | 0    | 1.3        | 2.3                                              | 0.1  | 0.7   | 0    | 3          |            |

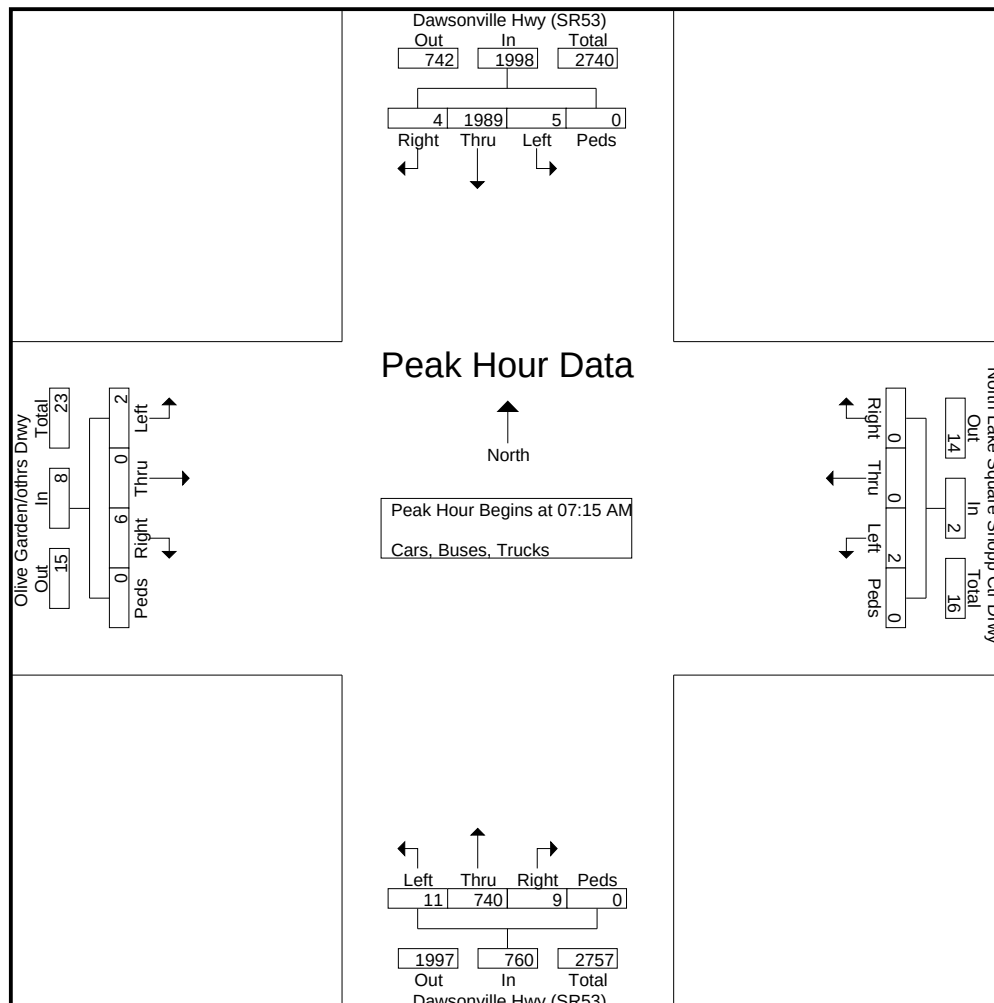
# Reliable Traffic Data Services, LLC

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TMC Data  
Dawsonville Hwy (SR53) @ North Lake  
Square Shopp Ctr Drwy, Gainesville, GA  
7-9am I 4-6pm

File Name : 40160001  
Site Code : 40160001  
Start Date : 3/22/2017  
Page No : 2

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Olive Garden/others Drwy<br>Eastbound |      |       |      |            | North Lake Square<br>Shopp Ctr Drwy<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|---------------------------------------|------|-------|------|------------|--------------------------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                                  | Thru | Right | Peds | App. Total | Left                                             | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                                       |      |       |      |            |                                                  |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:15 AM       |                                      |      |       |      |            |                                      |      |       |      |            |                                       |      |       |      |            |                                                  |      |       |      |            |            |
| 07:15 AM                                                   | 1                                    | 163  | 1     | 0    | 165        | 0                                    | 489  | 0     | 0    | 489        | 1                                     | 0    | 1     | 0    | 2          | 0                                                | 0    | 0     | 0    | 0          | 656        |
| 07:30 AM                                                   | 4                                    | 174  | 1     | 0    | 179        | 1                                    | 552  | 0     | 0    | 553        | 1                                     | 0    | 2     | 0    | 3          | 0                                                | 0    | 0     | 0    | 0          | 735        |
| 07:45 AM                                                   | 2                                    | 189  | 3     | 0    | 194        | 1                                    | 536  | 3     | 0    | 540        | 0                                     | 0    | 1     | 0    | 1          | 1                                                | 0    | 0     | 0    | 1          | 736        |
| 08:00 AM                                                   | 4                                    | 214  | 4     | 0    | 222        | 3                                    | 412  | 1     | 0    | 416        | 0                                     | 0    | 2     | 0    | 2          | 1                                                | 0    | 0     | 0    | 1          | 641        |
| Total Volume                                               | 11                                   | 740  | 9     | 0    | 760        | 5                                    | 1989 | 4     | 0    | 1998       | 2                                     | 0    | 6     | 0    | 8          | 2                                                | 0    | 0     | 0    | 2          | 2768       |
| % App. Total                                               | 1.4                                  | 97.4 | 1.2   | 0    |            | 0.3                                  | 99.5 | 0.2   | 0    |            | 25                                    | 0    | 75    | 0    |            | 100                                              | 0    | 0     | 0    |            |            |
| PHF                                                        | .688                                 | .864 | .563  | .000 | .856       | .417                                 | .901 | .333  | .000 | .903       | .500                                  | .000 | .750  | .000 | .667       | .500                                             | .000 | .000  | .000 | .500       | .940       |



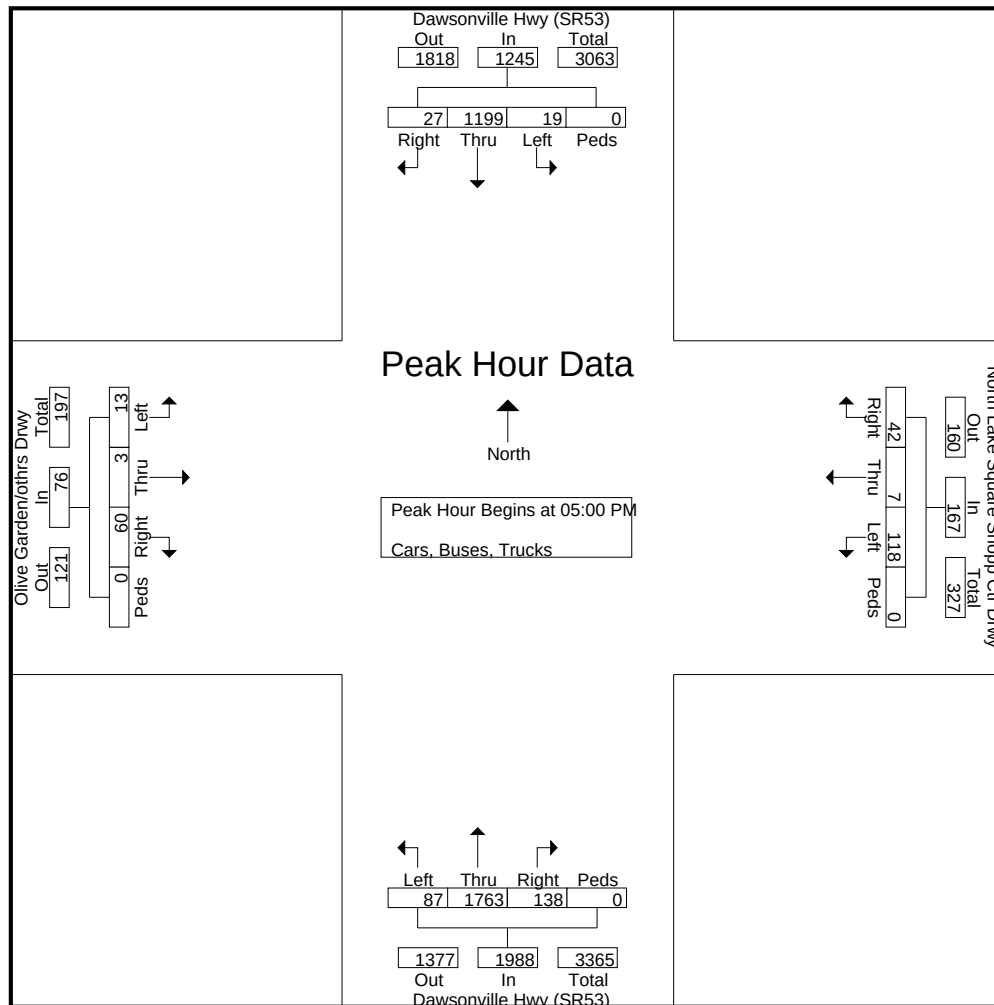
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TMC Data  
Dawsonville Hwy (SR53) @ North Lake  
Square Shopp Ctr Drwy, Gainesville, GA  
7-9am I 4-6pm

File Name : 40160001  
Site Code : 40160001  
Start Date : 3/22/2017  
Page No : 3

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Olive Garden/others Drwy<br>Eastbound |      |       |      |            | North Lake Square<br>Shopp Ctr Drwy<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|---------------------------------------|------|-------|------|------------|--------------------------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                                  | Thru | Right | Peds | App. Total | Left                                             | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                                       |      |       |      |            |                                                  |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                                      |      |       |      |            |                                      |      |       |      |            |                                       |      |       |      |            |                                                  |      |       |      |            |            |
| 05:00 PM                                                   | 28                                   | 433  | 39    | 0    | 500        | 1                                    | 287  | 5     | 0    | 293        | 4                                     | 1    | 14    | 0    | 19         | 25                                               | 1    | 5     | 0    | 31         | 843        |
| 05:15 PM                                                   | 18                                   | 439  | 24    | 0    | 481        | 6                                    | 296  | 7     | 0    | 309        | 3                                     | 2    | 12    | 0    | 17         | 31                                               | 2    | 11    | 0    | 44         | 851        |
| 05:30 PM                                                   | 16                                   | 447  | 37    | 0    | 500        | 4                                    | 312  | 6     | 0    | 322        | 1                                     | 0    | 19    | 0    | 20         | 35                                               | 3    | 14    | 0    | 52         | 894        |
| 05:45 PM                                                   | 25                                   | 444  | 38    | 0    | 507        | 8                                    | 304  | 9     | 0    | 321        | 5                                     | 0    | 15    | 0    | 20         | 27                                               | 1    | 12    | 0    | 40         | 888        |
| Total Volume                                               | 87                                   | 1763 | 138   | 0    | 1988       | 19                                   | 1199 | 27    | 0    | 1245       | 13                                    | 3    | 60    | 0    | 76         | 118                                              | 7    | 42    | 0    | 167        | 3476       |
| % App. Total                                               | 4.4                                  | 88.7 | 6.9   | 0    |            | 1.5                                  | 96.3 | 2.2   | 0    |            | 17.1                                  | 3.9  | 78.9  | 0    |            | 70.7                                             | 4.2  | 25.1  | 0    |            |            |
| PHF                                                        | .777                                 | .986 | .885  | .000 | .980       | .594                                 | .961 | .750  | .000 | .967       | .650                                  | .375 | .789  | .000 | .950       | .843                                             | .583 | .750  | .000 | .803       | .972       |





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TMC Data  
Dawsonville Hwy (SR53) @ Beechwood Blvd  
Gainesville, GA  
7-9am I 4.30-6.30pm

File Name : 39520006  
Site Code : 39520006  
Start Date : 11/17/2016  
Page No : 1

## Groups Printed- Cars, Buses, Trucks

|               | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Beechwood Blvd<br>Eastbound |      |       |      |            | Commercial Drwy<br>(Closed)<br>Westbound |      |       |      |            |            |       |
|---------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|-----------------------------|------|-------|------|------------|------------------------------------------|------|-------|------|------------|------------|-------|
| Start Time    | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                        | Thru | Right | Peds | App. Total | Left                                     | Thru | Right | Peds | App. Total | Int. Total |       |
| 07:00 AM      | 2                                    | 167  | 0     | 0    | 169        | 0                                    | 367  | 2     | 0    | 369        | 1                           | 0    | 10    | 0    | 11         | 0                                        | 0    | 0     | 0    | 0          | 0          | 549   |
| 07:15 AM      | 6                                    | 172  | 0     | 0    | 178        | 0                                    | 492  | 1     | 0    | 493        | 1                           | 0    | 9     | 0    | 10         | 0                                        | 0    | 0     | 0    | 0          | 0          | 681   |
| 07:30 AM      | 8                                    | 187  | 0     | 0    | 195        | 0                                    | 564  | 0     | 0    | 564        | 0                           | 0    | 12    | 0    | 12         | 0                                        | 0    | 0     | 0    | 0          | 0          | 771   |
| 07:45 AM      | 5                                    | 203  | 0     | 0    | 208        | 0                                    | 535  | 1     | 0    | 536        | 3                           | 0    | 11    | 0    | 14         | 0                                        | 0    | 0     | 0    | 0          | 0          | 758   |
| Total         | 21                                   | 729  | 0     | 0    | 750        | 0                                    | 1958 | 4     | 0    | 1962       | 5                           | 0    | 42    | 0    | 47         | 0                                        | 0    | 0     | 0    | 0          | 0          | 2759  |
|               |                                      |      |       |      |            |                                      |      |       |      |            |                             |      |       |      |            |                                          |      |       |      |            |            |       |
| 08:00 AM      | 8                                    | 225  | 0     | 0    | 233        | 0                                    | 415  | 0     | 0    | 415        | 1                           | 0    | 9     | 0    | 10         | 0                                        | 0    | 0     | 0    | 0          | 0          | 658   |
| 08:15 AM      | 5                                    | 203  | 0     | 0    | 208        | 0                                    | 441  | 0     | 0    | 441        | 0                           | 0    | 3     | 0    | 3          | 0                                        | 0    | 0     | 0    | 0          | 0          | 652   |
| 08:30 AM      | 3                                    | 198  | 0     | 0    | 201        | 0                                    | 365  | 2     | 0    | 367        | 0                           | 0    | 11    | 0    | 11         | 0                                        | 0    | 0     | 0    | 0          | 0          | 579   |
| 08:45 AM      | 3                                    | 192  | 0     | 0    | 195        | 0                                    | 341  | 1     | 0    | 342        | 1                           | 0    | 3     | 0    | 4          | 0                                        | 0    | 0     | 0    | 0          | 0          | 541   |
| Total         | 19                                   | 818  | 0     | 0    | 837        | 0                                    | 1562 | 3     | 0    | 1565       | 2                           | 0    | 26    | 0    | 28         | 0                                        | 0    | 0     | 0    | 0          | 0          | 2430  |
| *** BREAK *** |                                      |      |       |      |            |                                      |      |       |      |            |                             |      |       |      |            |                                          |      |       |      |            |            |       |
|               |                                      |      |       |      |            |                                      |      |       |      |            |                             |      |       |      |            |                                          |      |       |      |            |            |       |
| 04:30 PM      | 16                                   | 443  | 0     | 0    | 459        | 0                                    | 312  | 1     | 0    | 313        | 0                           | 0    | 14    | 0    | 14         | 0                                        | 0    | 0     | 0    | 0          | 0          | 786   |
| 04:45 PM      | 15                                   | 497  | 0     | 0    | 512        | 0                                    | 327  | 0     | 0    | 327        | 0                           | 0    | 9     | 0    | 9          | 0                                        | 0    | 0     | 0    | 0          | 0          | 848   |
| Total         | 31                                   | 940  | 0     | 0    | 971        | 0                                    | 639  | 1     | 0    | 640        | 0                           | 0    | 23    | 0    | 23         | 0                                        | 0    | 0     | 0    | 0          | 0          | 1634  |
|               |                                      |      |       |      |            |                                      |      |       |      |            |                             |      |       |      |            |                                          |      |       |      |            |            |       |
| 05:00 PM      | 18                                   | 488  | 0     | 0    | 506        | 0                                    | 347  | 0     | 0    | 347        | 0                           | 0    | 5     | 0    | 5          | 0                                        | 0    | 0     | 0    | 0          | 0          | 858   |
| 05:15 PM      | 20                                   | 506  | 0     | 0    | 526        | 0                                    | 354  | 3     | 0    | 357        | 0                           | 0    | 17    | 0    | 17         | 0                                        | 0    | 0     | 0    | 0          | 0          | 900   |
| 05:30 PM      | 31                                   | 494  | 0     | 0    | 525        | 0                                    | 346  | 0     | 0    | 346        | 0                           | 0    | 10    | 0    | 10         | 0                                        | 0    | 0     | 0    | 0          | 0          | 881   |
| 05:45 PM      | 17                                   | 510  | 0     | 0    | 527        | 0                                    | 341  | 6     | 0    | 347        | 1                           | 0    | 15    | 0    | 16         | 0                                        | 0    | 0     | 0    | 0          | 0          | 890   |
| Total         | 86                                   | 1998 | 0     | 0    | 2084       | 0                                    | 1388 | 9     | 0    | 1397       | 1                           | 0    | 47    | 0    | 48         | 0                                        | 0    | 0     | 0    | 0          | 0          | 3529  |
|               |                                      |      |       |      |            |                                      |      |       |      |            |                             |      |       |      |            |                                          |      |       |      |            |            |       |
| 06:00 PM      | 23                                   | 484  | 0     | 0    | 507        | 0                                    | 338  | 1     | 0    | 339        | 1                           | 0    | 9     | 0    | 10         | 0                                        | 0    | 0     | 0    | 0          | 0          | 856   |
| 06:15 PM      | 19                                   | 468  | 0     | 0    | 487        | 0                                    | 323  | 2     | 0    | 325        | 1                           | 0    | 14    | 0    | 15         | 0                                        | 0    | 0     | 0    | 0          | 0          | 827   |
| Grand Total   | 199                                  | 5437 | 0     | 0    | 5636       | 0                                    | 6208 | 20    | 0    | 6228       | 10                          | 0    | 161   | 0    | 171        | 0                                        | 0    | 0     | 0    | 0          | 0          | 12035 |
| Apprch %      | 3.5                                  | 96.5 | 0     | 0    |            | 0                                    | 99.7 | 0.3   | 0    |            | 5.8                         | 0    | 94.2  | 0    |            | 0                                        | 0    | 0     | 0    | 0          |            |       |
| Total %       | 1.7                                  | 45.2 | 0     | 0    | 46.8       | 0                                    | 51.6 | 0.2   | 0    | 51.7       | 0.1                         | 0    | 1.3   | 0    | 1.4        | 0                                        | 0    | 0     | 0    | 0          | 0          |       |

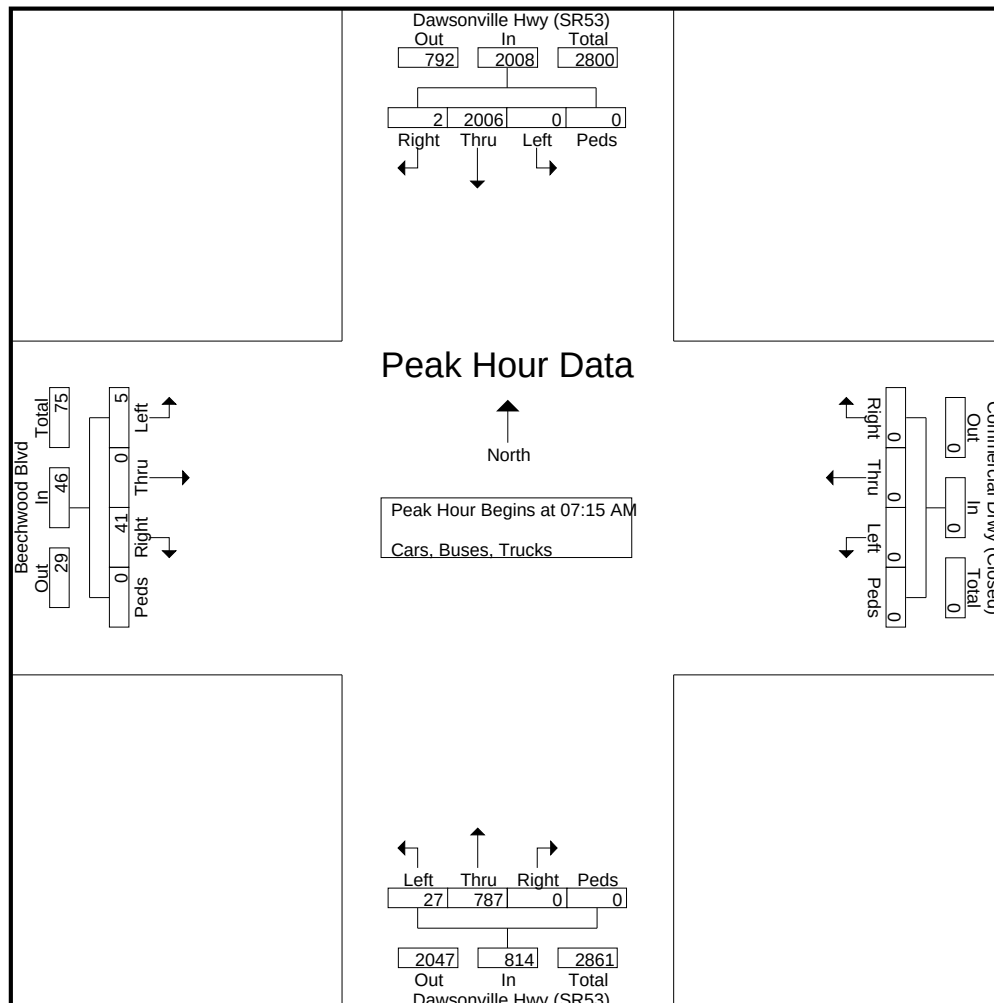
# Reliable Traffic Data Services, LLC

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TMC Data  
Dawsonville Hwy (SR53) @ Beechwood Blvd  
Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520006  
Site Code : 39520006  
Start Date : 11/17/2016  
Page No : 2

|                                                            | Dawsonville Hwy (SR53) Northbound |      |       |      |            | Dawsonville Hwy (SR53) Southbound |      |       |      |            | Beechwood Blvd Eastbound |      |       |      |            | Commercial Drwy (Closed) Westbound |      |       |      |            |            |
|------------------------------------------------------------|-----------------------------------|------|-------|------|------------|-----------------------------------|------|-------|------|------------|--------------------------|------|-------|------|------------|------------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                              | Thru | Right | Peds | App. Total | Left                              | Thru | Right | Peds | App. Total | Left                     | Thru | Right | Peds | App. Total | Left                               | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                                   |      |       |      |            |                                   |      |       |      |            |                          |      |       |      |            |                                    |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:15 AM       |                                   |      |       |      |            |                                   |      |       |      |            |                          |      |       |      |            |                                    |      |       |      |            |            |
| 07:15 AM                                                   | 6                                 | 172  | 0     | 0    | 178        | 0                                 | 492  | 1     | 0    | 493        | 1                        | 0    | 9     | 0    | 10         | 0                                  | 0    | 0     | 0    | 0          | 681        |
| 07:30 AM                                                   | 8                                 | 187  | 0     | 0    | 195        | 0                                 | 564  | 0     | 0    | 564        | 0                        | 0    | 12    | 0    | 12         | 0                                  | 0    | 0     | 0    | 0          | 771        |
| 07:45 AM                                                   | 5                                 | 203  | 0     | 0    | 208        | 0                                 | 535  | 1     | 0    | 536        | 3                        | 0    | 11    | 0    | 14         | 0                                  | 0    | 0     | 0    | 0          | 758        |
| 08:00 AM                                                   | 8                                 | 225  | 0     | 0    | 233        | 0                                 | 415  | 0     | 0    | 415        | 1                        | 0    | 9     | 0    | 10         | 0                                  | 0    | 0     | 0    | 0          | 658        |
| Total Volume                                               | 27                                | 787  | 0     | 0    | 814        | 0                                 | 2006 | 2     | 0    | 2008       | 5                        | 0    | 41    | 0    | 46         | 0                                  | 0    | 0     | 0    | 0          | 2868       |
| % App. Total                                               | 3.3                               | 96.7 | 0     | 0    |            | 0                                 | 99.9 | 0.1   | 0    |            | 10.9                     | 0    | 89.1  | 0    |            | 0                                  | 0    | 0     | 0    |            |            |
| PHF                                                        | .844                              | .874 | .000  | .000 | .873       | .000                              | .889 | .500  | .000 | .890       | .417                     | .000 | .854  | .000 | .821       | .000                               | .000 | .000  | .000 | .000       | .930       |



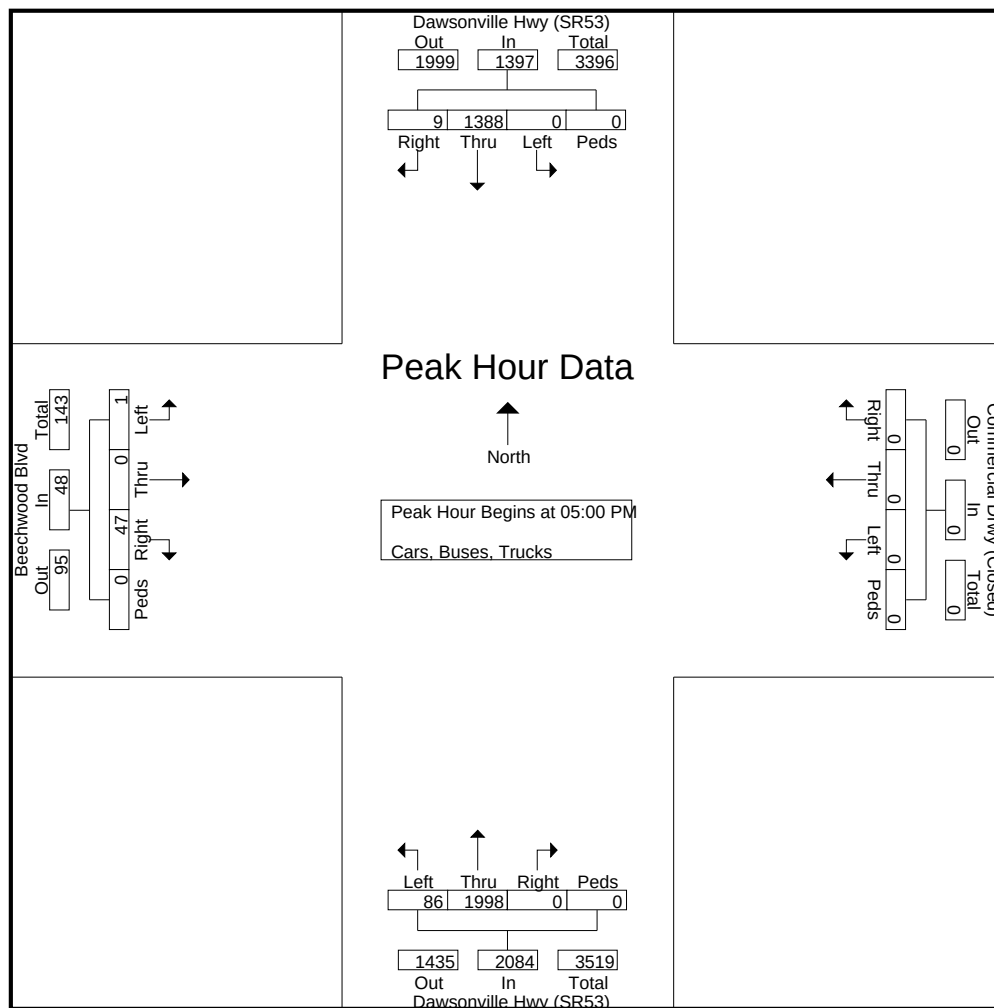
# Reliable Traffic Data Services, LLC

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TMC Data  
Dawsonville Hwy (SR53) @ Beechwood Blvd  
Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520006  
Site Code : 39520006  
Start Date : 11/17/2016  
Page No : 3

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Beechwood Blvd<br>Eastbound |      |       |      |            | Commercial Drwy<br>(Closed)<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|-----------------------------|------|-------|------|------------|------------------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                        | Thru | Right | Peds | App. Total | Left                                     | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                             |      |       |      |            |                                          |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                                      |      |       |      |            |                                      |      |       |      |            |                             |      |       |      |            |                                          |      |       |      |            |            |
| 05:00 PM                                                   | 18                                   | 488  | 0     | 0    | 506        | 0                                    | 347  | 0     | 0    | 347        | 0                           | 0    | 5     | 0    | 5          | 0                                        | 0    | 0     | 0    | 0          | 858        |
| 05:15 PM                                                   | 20                                   | 506  | 0     | 0    | 526        | 0                                    | 354  | 3     | 0    | 357        | 0                           | 0    | 17    | 0    | 17         | 0                                        | 0    | 0     | 0    | 0          | 900        |
| 05:30 PM                                                   | 31                                   | 494  | 0     | 0    | 525        | 0                                    | 346  | 0     | 0    | 346        | 0                           | 0    | 10    | 0    | 10         | 0                                        | 0    | 0     | 0    | 0          | 881        |
| 05:45 PM                                                   | 17                                   | 510  | 0     | 0    | 527        | 0                                    | 341  | 6     | 0    | 347        | 1                           | 0    | 15    | 0    | 16         | 0                                        | 0    | 0     | 0    | 0          | 890        |
| Total Volume                                               | 86                                   | 1998 | 0     | 0    | 2084       | 0                                    | 1388 | 9     | 0    | 1397       | 1                           | 0    | 47    | 0    | 48         | 0                                        | 0    | 0     | 0    | 0          | 3529       |
| % App. Total                                               | 4.1                                  | 95.9 | 0     | 0    |            | 0                                    | 99.4 | 0.6   | 0    |            | 2.1                         | 0    | 97.9  | 0    |            | 0                                        | 0    | 0     | 0    |            |            |
| PHF                                                        | .694                                 | .979 | .000  | .000 | .989       | .000                                 | .980 | .375  | .000 | .978       | .250                        | .000 | .691  | .000 | .706       | .000                                     | .000 | .000  | .000 | .000       | .980       |



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TMC Data  
Dawsonville Hwy (SR53) @ McEver Rd  
Gainesville, GA  
7-9am I 4.30-6.30pm

File Name : 39520007  
Site Code : 39520007  
Start Date : 11/17/2016  
Page No : 1

## Groups Printed- Cars, Buses, Trucks

|               | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | McEver Rd<br>Eastbound |      |       |      |            | Home Depot Drwy<br>Westbound |      |       |      |            |            |
|---------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|------------|
| Start Time    | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                   | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 58                                   | 98   | 3     | 0    | 159        | 2                                    | 206  | 164   | 0    | 372        | 67                     | 4    | 48    | 0    | 119        | 4                            | 2    | 4     | 0    | 10         | 660        |
| 07:15 AM      | 67                                   | 104  | 7     | 0    | 178        | 5                                    | 276  | 187   | 0    | 468        | 93                     | 4    | 88    | 0    | 185        | 8                            | 1    | 2     | 0    | 11         | 842        |
| 07:30 AM      | 72                                   | 110  | 15    | 0    | 197        | 6                                    | 317  | 236   | 0    | 559        | 99                     | 7    | 82    | 0    | 188        | 7                            | 4    | 3     | 0    | 14         | 958        |
| 07:45 AM      | 78                                   | 115  | 18    | 0    | 211        | 10                                   | 325  | 226   | 0    | 561        | 96                     | 6    | 93    | 0    | 195        | 15                           | 4    | 3     | 0    | 22         | 989        |
| Total         | 275                                  | 427  | 43    | 0    | 745        | 23                                   | 1124 | 813   | 0    | 1960       | 355                    | 21   | 311   | 0    | 687        | 34                           | 11   | 12    | 0    | 57         | 3449       |
| 08:00 AM      | 65                                   | 136  | 15    | 0    | 216        | 7                                    | 252  | 179   | 0    | 438        | 102                    | 11   | 79    | 0    | 192        | 12                           | 10   | 10    | 0    | 32         | 878        |
| 08:15 AM      | 66                                   | 121  | 20    | 0    | 207        | 14                                   | 264  | 153   | 0    | 431        | 83                     | 14   | 67    | 0    | 164        | 14                           | 6    | 10    | 0    | 30         | 832        |
| 08:30 AM      | 51                                   | 118  | 21    | 0    | 190        | 20                                   | 233  | 146   | 0    | 399        | 85                     | 16   | 72    | 0    | 173        | 20                           | 8    | 6     | 0    | 34         | 796        |
| 08:45 AM      | 57                                   | 106  | 29    | 0    | 192        | 15                                   | 221  | 108   | 0    | 344        | 102                    | 14   | 81    | 0    | 197        | 18                           | 5    | 10    | 0    | 33         | 766        |
| Total         | 239                                  | 481  | 85    | 0    | 805        | 56                                   | 970  | 586   | 0    | 1612       | 372                    | 55   | 299   | 0    | 726        | 64                           | 29   | 36    | 0    | 129        | 3272       |
| *** BREAK *** |                                      |      |       |      |            |                                      |      |       |      |            |                        |      |       |      |            |                              |      |       |      |            |            |
| 04:30 PM      | 94                                   | 286  | 16    | 0    | 396        | 11                                   | 242  | 90    | 0    | 343        | 178                    | 35   | 78    | 0    | 291        | 30                           | 33   | 19    | 0    | 82         | 1112       |
| 04:45 PM      | 109                                  | 312  | 12    | 0    | 433        | 9                                    | 213  | 112   | 0    | 334        | 215                    | 37   | 93    | 0    | 345        | 31                           | 27   | 21    | 0    | 79         | 1191       |
| Total         | 203                                  | 598  | 28    | 0    | 829        | 20                                   | 455  | 202   | 0    | 677        | 393                    | 72   | 171   | 0    | 636        | 61                           | 60   | 40    | 0    | 161        | 2303       |
| 05:00 PM      | 108                                  | 352  | 17    | 0    | 477        | 15                                   | 257  | 115   | 0    | 387        | 178                    | 42   | 122   | 0    | 342        | 27                           | 19   | 17    | 0    | 63         | 1269       |
| 05:15 PM      | 101                                  | 335  | 11    | 0    | 447        | 12                                   | 259  | 137   | 0    | 408        | 224                    | 63   | 74    | 0    | 361        | 10                           | 33   | 19    | 0    | 62         | 1278       |
| 05:30 PM      | 114                                  | 327  | 10    | 0    | 451        | 17                                   | 216  | 110   | 0    | 343        | 227                    | 59   | 95    | 0    | 381        | 22                           | 21   | 16    | 0    | 59         | 1234       |
| 05:45 PM      | 110                                  | 348  | 8     | 0    | 466        | 18                                   | 297  | 119   | 0    | 434        | 216                    | 49   | 95    | 0    | 360        | 28                           | 18   | 29    | 0    | 75         | 1335       |
| Total         | 433                                  | 1362 | 46    | 0    | 1841       | 62                                   | 1029 | 481   | 0    | 1572       | 845                    | 213  | 386   | 0    | 1444       | 87                           | 91   | 81    | 0    | 259        | 5116       |
| 06:00 PM      | 106                                  | 292  | 15    | 0    | 413        | 22                                   | 236  | 102   | 0    | 360        | 230                    | 24   | 88    | 0    | 342        | 32                           | 18   | 28    | 0    | 78         | 1193       |
| 06:15 PM      | 98                                   | 290  | 12    | 0    | 400        | 11                                   | 238  | 86    | 0    | 335        | 191                    | 16   | 92    | 0    | 299        | 29                           | 14   | 12    | 0    | 55         | 1089       |
| Grand Total   | 1354                                 | 3450 | 229   | 0    | 5033       | 194                                  | 4052 | 2270  | 0    | 6516       | 2386                   | 401  | 1347  | 0    | 4134       | 307                          | 223  | 209   | 0    | 739        | 16422      |
| Apprch %      | 26.9                                 | 68.5 | 4.5   | 0    |            | 3                                    | 62.2 | 34.8  | 0    |            | 57.7                   | 9.7  | 32.6  | 0    |            | 41.5                         | 30.2 | 28.3  | 0    |            |            |
| Total %       | 8.2                                  | 21   | 1.4   | 0    | 30.6       | 1.2                                  | 24.7 | 13.8  | 0    | 39.7       | 14.5                   | 2.4  | 8.2   | 0    | 25.2       | 1.9                          | 1.4  | 1.3   | 0    | 4.5        |            |

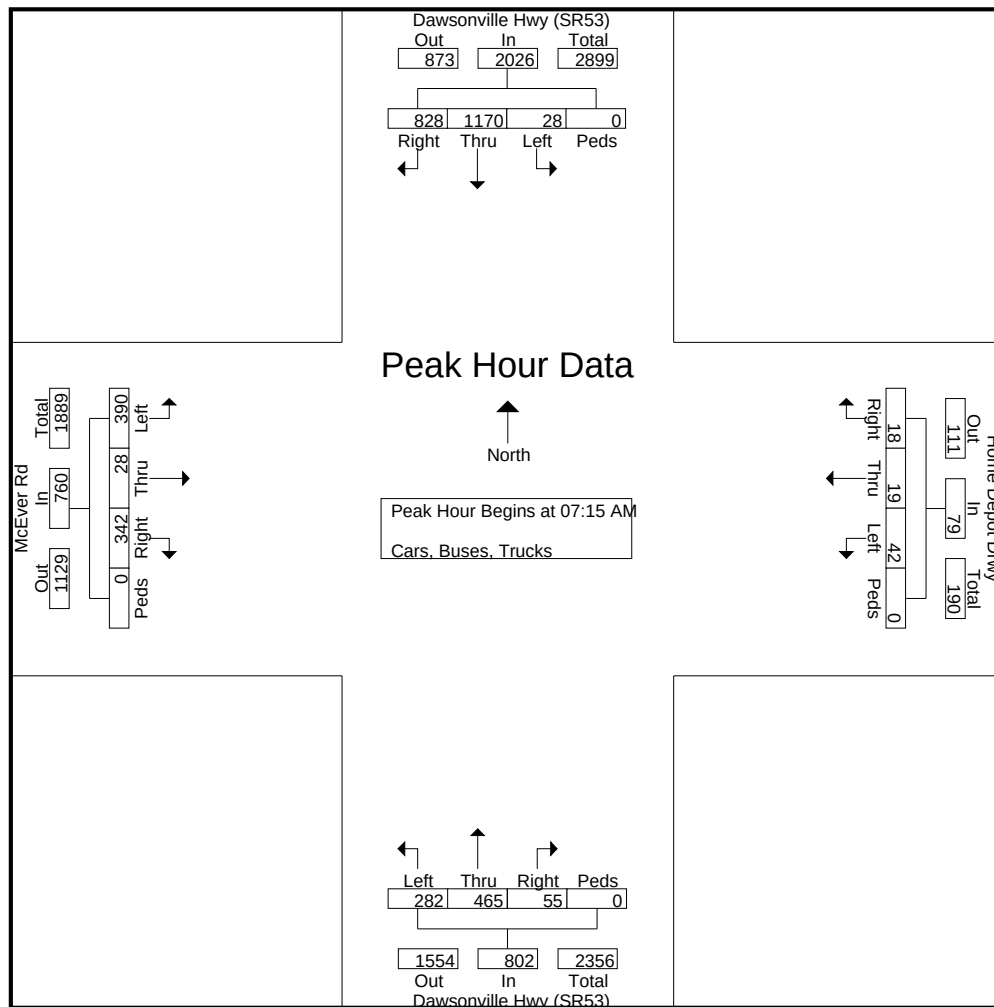
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TMC Data  
Dawsonville Hwy (SR53) @ McEver Rd  
Gainesville, GA  
7-9am I 4.30-6.30pm

File Name : 39520007  
Site Code : 39520007  
Start Date : 11/17/2016  
Page No : 2

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |            |           |      |            | Dawsonville Hwy (SR53)<br>Southbound |            |            |      |            | McEver Rd<br>Eastbound |           |           |      |            | Home Depot Drwy<br>Westbound |           |           |      |            |            |
|------------------------------------------------------------|--------------------------------------|------------|-----------|------|------------|--------------------------------------|------------|------------|------|------------|------------------------|-----------|-----------|------|------------|------------------------------|-----------|-----------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru       | Right     | Peds | App. Total | Left                                 | Thru       | Right      | Peds | App. Total | Left                   | Thru      | Right     | Peds | App. Total | Left                         | Thru      | Right     | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                                      |            |           |      |            |                                      |            |            |      |            |                        |           |           |      |            |                              |           |           |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:15 AM       |                                      |            |           |      |            |                                      |            |            |      |            |                        |           |           |      |            |                              |           |           |      |            |            |
| 07:15 AM                                                   | 67                                   | 104        | 7         | 0    | 178        | 5                                    | 276        | 187        | 0    | 468        | 93                     | 4         | 88        | 0    | 185        | 8                            | 1         | 2         | 0    | 11         | 842        |
| 07:30 AM                                                   | 72                                   | 110        | 15        | 0    | 197        | 6                                    | 317        | <b>236</b> | 0    | 559        | 99                     | 7         | 82        | 0    | 188        | 7                            | 4         | 3         | 0    | 14         | 958        |
| 07:45 AM                                                   | <b>78</b>                            | <b>115</b> | <b>18</b> | 0    | <b>211</b> | <b>10</b>                            | <b>325</b> | 226        | 0    | <b>561</b> | 96                     | 6         | <b>93</b> | 0    | <b>195</b> | <b>15</b>                    | <b>4</b>  | <b>3</b>  | 0    | <b>22</b>  | <b>989</b> |
| 08:00 AM                                                   | 65                                   | <b>136</b> | 15        | 0    | <b>216</b> | 7                                    | 252        | 179        | 0    | 438        | <b>102</b>             | <b>11</b> | 79        | 0    | 192        | <b>12</b>                    | <b>10</b> | <b>10</b> | 0    | <b>32</b>  | 878        |
| Total Volume                                               | 282                                  | 465        | 55        | 0    | 802        | 28                                   | 1170       | 828        | 0    | 2026       | 390                    | 28        | 342       | 0    | 760        | 42                           | 19        | 18        | 0    | 79         | 3667       |
| % App. Total                                               | 35.2                                 | 58         | 6.9       | 0    |            | 1.4                                  | 57.7       | 40.9       | 0    |            | 51.3                   | 3.7       | 45        | 0    |            | 53.2                         | 24.1      | 22.8      | 0    |            |            |
| PHF                                                        | .904                                 | .855       | .764      | .000 | .928       | .700                                 | .900       | .877       | .000 | .903       | .956                   | .636      | .919      | .000 | .974       | .700                         | .475      | .450      | .000 | .617       | .927       |



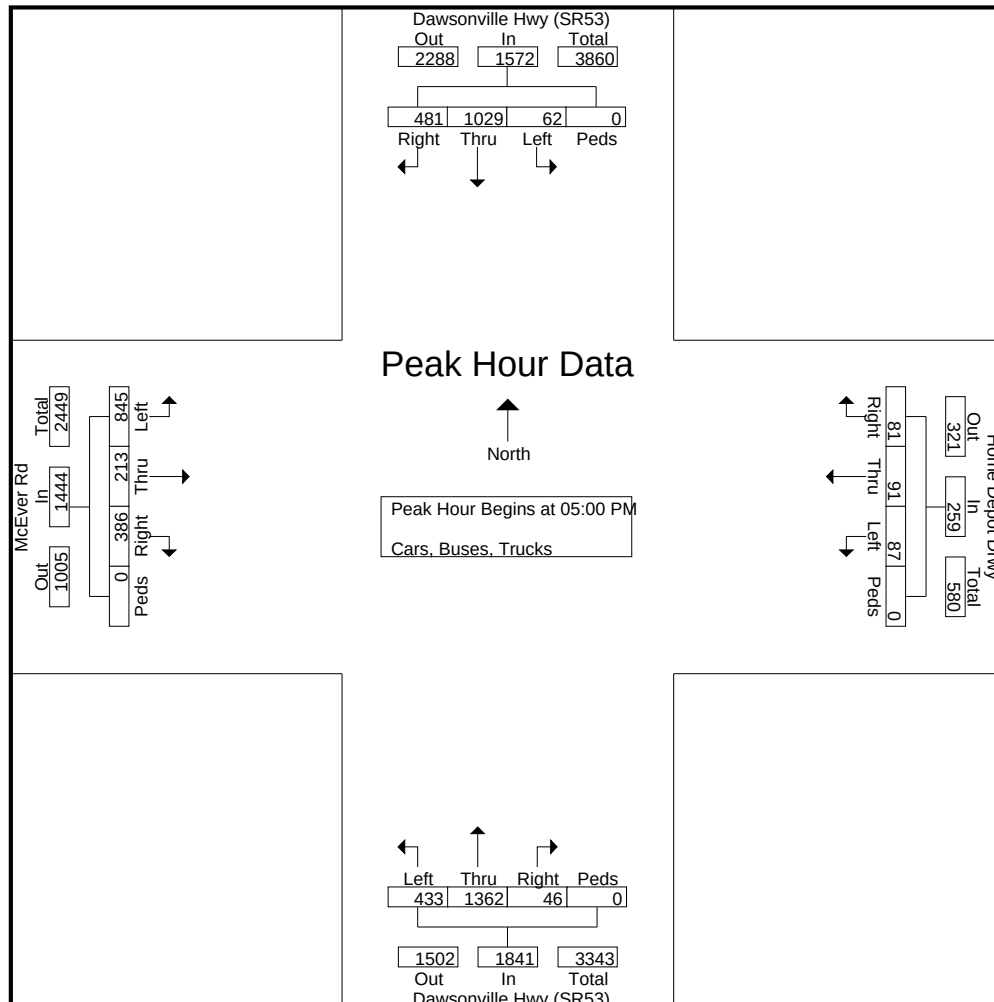
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TMC Data  
Dawsonville Hwy (SR53) @ McEver Rd  
Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520007  
Site Code : 39520007  
Start Date : 11/17/2016  
Page No : 3

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | McEver Rd<br>Eastbound |      |       |      |            | Home Depot Drwy<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                   | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                        |      |       |      |            |                              |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                                      |      |       |      |            |                                      |      |       |      |            |                        |      |       |      |            |                              |      |       |      |            |            |
| 05:00 PM                                                   | 108                                  | 352  | 17    | 0    | 477        | 15                                   | 257  | 115   | 0    | 387        | 178                    | 42   | 122   | 0    | 342        | 27                           | 19   | 17    | 0    | 63         | 1269       |
| 05:15 PM                                                   | 101                                  | 335  | 11    | 0    | 447        | 12                                   | 259  | 137   | 0    | 408        | 224                    | 63   | 74    | 0    | 361        | 10                           | 33   | 19    | 0    | 62         | 1278       |
| 05:30 PM                                                   | 114                                  | 327  | 10    | 0    | 451        | 17                                   | 216  | 110   | 0    | 343        | 227                    | 59   | 95    | 0    | 381        | 22                           | 21   | 16    | 0    | 59         | 1234       |
| 05:45 PM                                                   | 110                                  | 348  | 8     | 0    | 466        | 18                                   | 297  | 119   | 0    | 434        | 216                    | 49   | 95    | 0    | 360        | 28                           | 18   | 29    | 0    | 75         | 1335       |
| Total Volume                                               | 433                                  | 1362 | 46    | 0    | 1841       | 62                                   | 1029 | 481   | 0    | 1572       | 845                    | 213  | 386   | 0    | 1444       | 87                           | 91   | 81    | 0    | 259        | 5116       |
| % App. Total                                               | 23.5                                 | 74   | 2.5   | 0    |            | 3.9                                  | 65.5 | 30.6  | 0    |            | 58.5                   | 14.8 | 26.7  | 0    |            | 33.6                         | 35.1 | 31.3  | 0    |            |            |
| PHF                                                        | .950                                 | .967 | .676  | .000 | .965       | .861                                 | .866 | .878  | .000 | .906       | .931                   | .845 | .791  | .000 | .948       | .777                         | .689 | .698  | .000 | .863       | .958       |



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TMC Data  
Dawsonville Hwy (SR53) @ Green Hill Cir  
Gainesville, GA  
7-9am I 4.30-6.30pm

File Name : 39520008  
Site Code : 39520008  
Start Date : 11/17/2016  
Page No : 1

## Groups Printed- Cars, Buses, Trucks

|               | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Green Hill Circle<br>Eastbound |      |       |      |            | Commercial Drwy<br>Westbound |      |       |      |            |            |
|---------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|--------------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|------------|
| Start Time    | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                           | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 13                                   | 123  | 0     | 0    | 136        | 1                                    | 236  | 7     | 0    | 244        | 10                             | 0    | 22    | 0    | 32         | 1                            | 0    | 0     | 0    | 1          | 413        |
| 07:15 AM      | 33                                   | 134  | 2     | 0    | 169        | 3                                    | 372  | 12    | 0    | 387        | 14                             | 1    | 25    | 0    | 40         | 2                            | 0    | 1     | 0    | 3          | 599        |
| 07:30 AM      | 28                                   | 167  | 1     | 0    | 196        | 2                                    | 387  | 10    | 0    | 399        | 17                             | 0    | 34    | 0    | 51         | 2                            | 0    | 2     | 0    | 4          | 650        |
| 07:45 AM      | 39                                   | 174  | 1     | 0    | 214        | 2                                    | 379  | 14    | 0    | 395        | 21                             | 1    | 36    | 0    | 58         | 2                            | 1    | 0     | 0    | 3          | 670        |
| Total         | 113                                  | 598  | 4     | 0    | 715        | 8                                    | 1374 | 43    | 0    | 1425       | 62                             | 2    | 117   | 0    | 181        | 7                            | 1    | 3     | 0    | 11         | 2332       |
| 08:00 AM      | 33                                   | 189  | 5     | 0    | 227        | 4                                    | 320  | 11    | 0    | 335        | 16                             | 0    | 39    | 0    | 55         | 2                            | 0    | 2     | 0    | 4          | 621        |
| 08:15 AM      | 35                                   | 224  | 3     | 0    | 262        | 4                                    | 318  | 17    | 0    | 339        | 13                             | 0    | 32    | 0    | 45         | 0                            | 0    | 0     | 0    | 0          | 646        |
| 08:30 AM      | 34                                   | 197  | 7     | 0    | 238        | 3                                    | 322  | 15    | 0    | 340        | 10                             | 1    | 28    | 0    | 39         | 1                            | 4    | 0     | 0    | 5          | 622        |
| 08:45 AM      | 29                                   | 205  | 7     | 0    | 241        | 5                                    | 324  | 10    | 0    | 339        | 15                             | 2    | 30    | 0    | 47         | 3                            | 2    | 1     | 0    | 6          | 633        |
| Total         | 131                                  | 815  | 22    | 0    | 968        | 16                                   | 1284 | 53    | 0    | 1353       | 54                             | 3    | 129   | 0    | 186        | 6                            | 6    | 3     | 0    | 15         | 2522       |
| *** BREAK *** |                                      |      |       |      |            |                                      |      |       |      |            |                                |      |       |      |            |                              |      |       |      |            |            |
| 04:30 PM      | 51                                   | 374  | 12    | 0    | 437        | 11                                   | 352  | 11    | 0    | 374        | 23                             | 1    | 30    | 0    | 54         | 20                           | 0    | 9     | 0    | 29         | 894        |
| 04:45 PM      | 57                                   | 408  | 18    | 0    | 483        | 8                                    | 361  | 10    | 0    | 379        | 30                             | 0    | 28    | 0    | 58         | 17                           | 5    | 9     | 0    | 31         | 951        |
| Total         | 108                                  | 782  | 30    | 0    | 920        | 19                                   | 713  | 21    | 0    | 753        | 53                             | 1    | 58    | 0    | 112        | 37                           | 5    | 18    | 0    | 60         | 1845       |
| 05:00 PM      | 60                                   | 436  | 20    | 0    | 516        | 7                                    | 348  | 13    | 0    | 368        | 21                             | 1    | 45    | 0    | 67         | 16                           | 8    | 4     | 0    | 28         | 979        |
| 05:15 PM      | 62                                   | 453  | 19    | 0    | 534        | 12                                   | 362  | 17    | 0    | 391        | 39                             | 2    | 36    | 0    | 77         | 19                           | 5    | 14    | 0    | 38         | 1040       |
| 05:30 PM      | 57                                   | 442  | 12    | 0    | 511        | 12                                   | 337  | 11    | 0    | 360        | 36                             | 6    | 33    | 0    | 75         | 16                           | 5    | 9     | 0    | 30         | 976        |
| 05:45 PM      | 69                                   | 418  | 19    | 0    | 506        | 9                                    | 345  | 12    | 0    | 366        | 36                             | 0    | 24    | 0    | 60         | 9                            | 2    | 11    | 0    | 22         | 954        |
| Total         | 248                                  | 1749 | 70    | 0    | 2067       | 40                                   | 1392 | 53    | 0    | 1485       | 132                            | 9    | 138   | 0    | 279        | 60                           | 20   | 38    | 0    | 118        | 3949       |
| 06:00 PM      | 62                                   | 389  | 22    | 0    | 473        | 4                                    | 369  | 17    | 0    | 390        | 40                             | 1    | 25    | 0    | 66         | 9                            | 6    | 16    | 0    | 31         | 960        |
| 06:15 PM      | 78                                   | 374  | 7     | 0    | 459        | 11                                   | 361  | 22    | 0    | 394        | 29                             | 1    | 19    | 0    | 49         | 16                           | 6    | 17    | 0    | 39         | 941        |
| Grand Total   | 740                                  | 4707 | 155   | 0    | 5602       | 98                                   | 5493 | 209   | 0    | 5800       | 370                            | 17   | 486   | 0    | 873        | 135                          | 44   | 95    | 0    | 274        | 12549      |
| Apprch %      | 13.2                                 | 84   | 2.8   | 0    |            | 1.7                                  | 94.7 | 3.6   | 0    |            | 42.4                           | 1.9  | 55.7  | 0    |            | 49.3                         | 16.1 | 34.7  | 0    |            |            |
| Total %       | 5.9                                  | 37.5 | 1.2   | 0    | 44.6       | 0.8                                  | 43.8 | 1.7   | 0    | 46.2       | 2.9                            | 0.1  | 3.9   | 0    | 7          | 1.1                          | 0.4  | 0.8   | 0    | 2.2        |            |

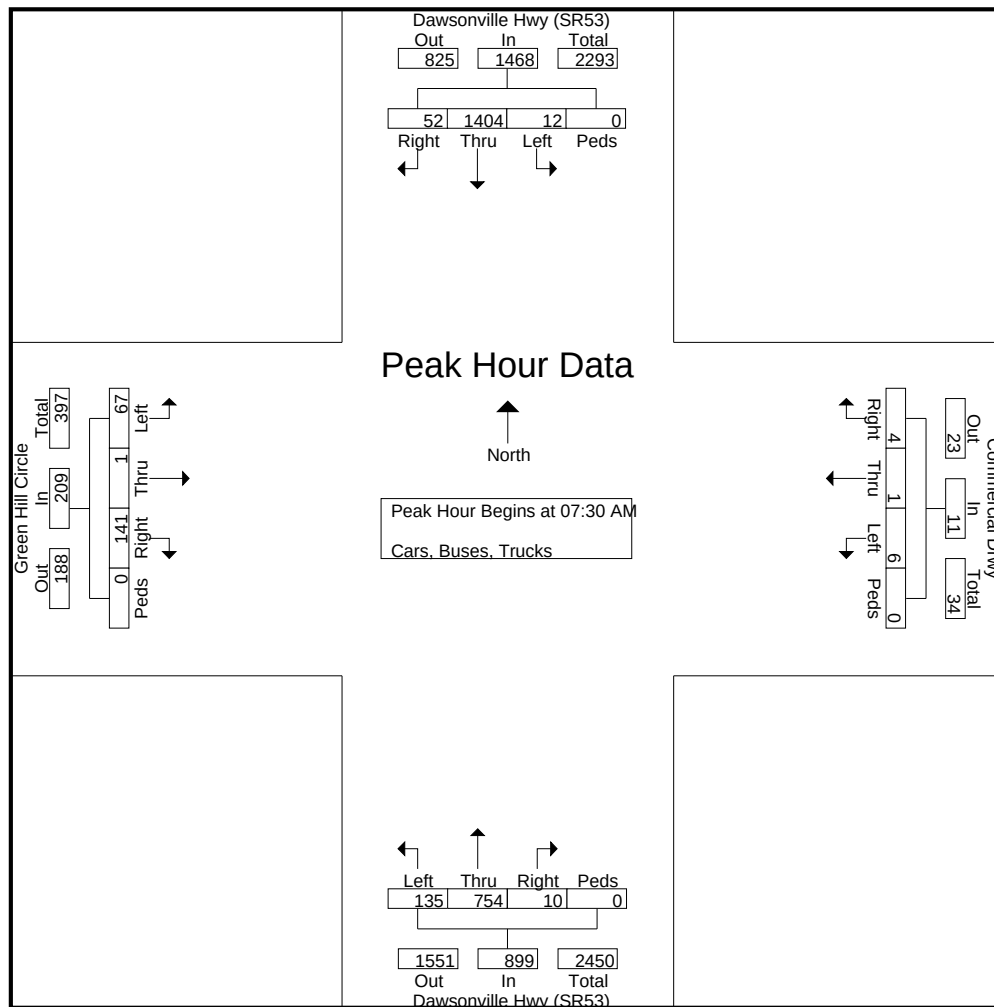
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TMC Data  
Dawsonville Hwy (SR53) @ Green Hill Cir  
Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520008  
Site Code : 39520008  
Start Date : 11/17/2016  
Page No : 2

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Green Hill Circle<br>Eastbound |      |       |      |            | Commercial Drwy<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|--------------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                           | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                                |      |       |      |            |                              |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                                      |      |       |      |            |                                      |      |       |      |            |                                |      |       |      |            |                              |      |       |      |            |            |
| 07:30 AM                                                   | 28                                   | 167  | 1     | 0    | 196        | 2                                    | 387  | 10    | 0    | 399        | 17                             | 0    | 34    | 0    | 51         | 2                            | 0    | 2     | 0    | 4          | 650        |
| 07:45 AM                                                   | 39                                   | 174  | 1     | 0    | 214        | 2                                    | 379  | 14    | 0    | 395        | 21                             | 1    | 36    | 0    | 58         | 2                            | 1    | 0     | 0    | 3          | 670        |
| 08:00 AM                                                   | 33                                   | 189  | 5     | 0    | 227        | 4                                    | 320  | 11    | 0    | 335        | 16                             | 0    | 39    | 0    | 55         | 2                            | 0    | 2     | 0    | 4          | 621        |
| 08:15 AM                                                   | 35                                   | 224  | 3     | 0    | 262        | 4                                    | 318  | 17    | 0    | 339        | 13                             | 0    | 32    | 0    | 45         | 0                            | 0    | 0     | 0    | 0          | 646        |
| Total Volume                                               | 135                                  | 754  | 10    | 0    | 899        | 12                                   | 1404 | 52    | 0    | 1468       | 67                             | 1    | 141   | 0    | 209        | 6                            | 1    | 4     | 0    | 11         | 2587       |
| % App. Total                                               | 15                                   | 83.9 | 1.1   | 0    |            | 0.8                                  | 95.6 | 3.5   | 0    |            | 32.1                           | 0.5  | 67.5  | 0    |            | 54.5                         | 9.1  | 36.4  | 0    |            |            |
| PHF                                                        | .865                                 | .842 | .500  | .000 | .858       | .750                                 | .907 | .765  | .000 | .920       | .798                           | .250 | .904  | .000 | .901       | .750                         | .250 | .500  | .000 | .688       | .965       |





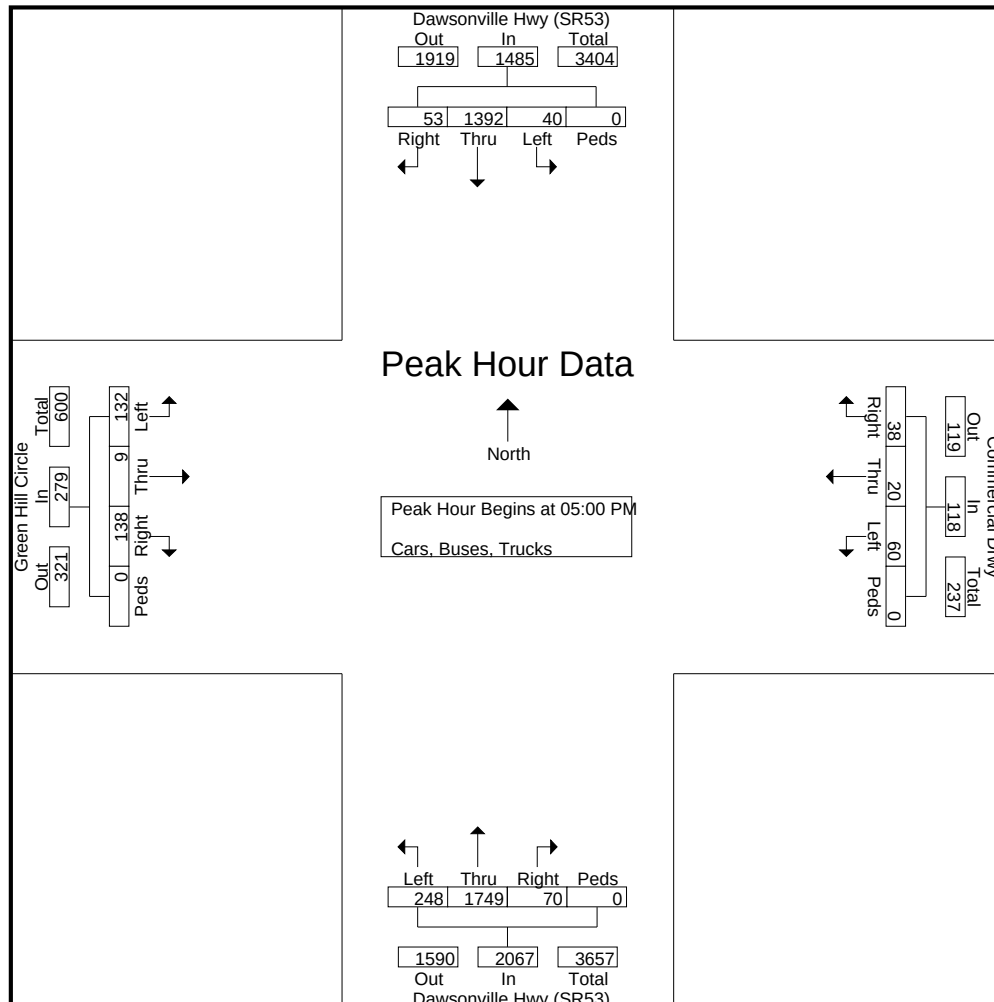
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7-9am | 4.30-6.30pm

File Name : 39520008  
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Start Date : 11/17/2016  
Page No : 3

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Green Hill Circle<br>Eastbound |      |       |      |            | Commercial Drwy<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|--------------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                           | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                                |      |       |      |            |                              |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                                      |      |       |      |            |                                      |      |       |      |            |                                |      |       |      |            |                              |      |       |      |            |            |
| 05:00 PM                                                   | 60                                   | 436  | 20    | 0    | 516        | 7                                    | 348  | 13    | 0    | 368        | 21                             | 1    | 45    | 0    | 67         | 16                           | 8    | 4     | 0    | 28         | 979        |
| 05:15 PM                                                   | 62                                   | 453  | 19    | 0    | 534        | 12                                   | 362  | 17    | 0    | 391        | 39                             | 2    | 36    | 0    | 77         | 19                           | 5    | 14    | 0    | 38         | 1040       |
| 05:30 PM                                                   | 57                                   | 442  | 12    | 0    | 511        | 12                                   | 337  | 11    | 0    | 360        | 36                             | 6    | 33    | 0    | 75         | 16                           | 5    | 9     | 0    | 30         | 976        |
| 05:45 PM                                                   | 69                                   | 418  | 19    | 0    | 506        | 9                                    | 345  | 12    | 0    | 366        | 36                             | 0    | 24    | 0    | 60         | 9                            | 2    | 11    | 0    | 22         | 954        |
| Total Volume                                               | 248                                  | 1749 | 70    | 0    | 2067       | 40                                   | 1392 | 53    | 0    | 1485       | 132                            | 9    | 138   | 0    | 279        | 60                           | 20   | 38    | 0    | 118        | 3949       |
| % App. Total                                               | 12                                   | 84.6 | 3.4   | 0    |            | 2.7                                  | 93.7 | 3.6   | 0    |            | 47.3                           | 3.2  | 49.5  | 0    |            | 50.8                         | 16.9 | 32.2  | 0    |            |            |
| PHF                                                        | .899                                 | .965 | .875  | .000 | .968       | .833                                 | .961 | .779  | .000 | .949       | .846                           | .375 | .767  | .000 | .906       | .789                         | .625 | .679  | .000 | .776       | .949       |



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Shallowford Rd, Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520009  
Site Code : 39520009  
Start Date : 11/17/2016  
Page No : 1

## Groups Printed- Cars, Buses, Trucks

|               | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Shallowford Rd<br>Eastbound |      |       |      |            | Commercial Drwy<br>Westbound |      |       |      |            |            |
|---------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|-----------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|------------|
| Start Time    | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                        | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 1                                    | 123  | 1     | 0    | 125        | 3                                    | 226  | 58    | 0    | 287        | 15                          | 0    | 1     | 0    | 16         | 1                            | 0    | 0     | 0    | 1          | 429        |
| 07:15 AM      | 4                                    | 136  | 2     | 0    | 142        | 3                                    | 254  | 74    | 0    | 331        | 18                          | 0    | 2     | 0    | 20         | 0                            | 0    | 0     | 0    | 0          | 493        |
| 07:30 AM      | 3                                    | 146  | 1     | 0    | 150        | 0                                    | 334  | 82    | 0    | 416        | 28                          | 0    | 4     | 0    | 32         | 0                            | 1    | 2     | 0    | 3          | 601        |
| 07:45 AM      | 3                                    | 178  | 6     | 0    | 187        | 0                                    | 342  | 85    | 0    | 427        | 35                          | 0    | 2     | 0    | 37         | 0                            | 0    | 0     | 0    | 0          | 651        |
| Total         | 11                                   | 583  | 10    | 0    | 604        | 6                                    | 1156 | 299   | 0    | 1461       | 96                          | 0    | 9     | 0    | 105        | 1                            | 1    | 2     | 0    | 4          | 2174       |
| 08:00 AM      | 3                                    | 188  | 3     | 0    | 194        | 0                                    | 307  | 87    | 0    | 394        | 34                          | 1    | 0     | 0    | 35         | 0                            | 1    | 1     | 0    | 2          | 625        |
| 08:15 AM      | 1                                    | 226  | 3     | 0    | 230        | 1                                    | 266  | 84    | 0    | 351        | 41                          | 1    | 2     | 0    | 44         | 2                            | 2    | 0     | 0    | 4          | 629        |
| 08:30 AM      | 7                                    | 186  | 8     | 0    | 201        | 0                                    | 268  | 82    | 0    | 350        | 45                          | 0    | 3     | 0    | 48         | 0                            | 1    | 0     | 0    | 1          | 600        |
| 08:45 AM      | 3                                    | 190  | 7     | 0    | 200        | 0                                    | 282  | 72    | 0    | 354        | 44                          | 2    | 5     | 0    | 51         | 0                            | 1    | 1     | 0    | 2          | 607        |
| Total         | 14                                   | 790  | 21    | 0    | 825        | 1                                    | 1123 | 325   | 0    | 1449       | 164                         | 4    | 10    | 0    | 178        | 2                            | 5    | 2     | 0    | 9          | 2461       |
| *** BREAK *** |                                      |      |       |      |            |                                      |      |       |      |            |                             |      |       |      |            |                              |      |       |      |            |            |
| 04:30 PM      | 9                                    | 322  | 23    | 0    | 354        | 2                                    | 302  | 102   | 0    | 406        | 109                         | 5    | 6     | 0    | 120        | 7                            | 6    | 5     | 0    | 18         | 898        |
| 04:45 PM      | 9                                    | 379  | 24    | 0    | 412        | 1                                    | 297  | 107   | 0    | 405        | 107                         | 2    | 6     | 0    | 115        | 17                           | 3    | 1     | 0    | 21         | 953        |
| Total         | 18                                   | 701  | 47    | 0    | 766        | 3                                    | 599  | 209   | 0    | 811        | 216                         | 7    | 12    | 0    | 235        | 24                           | 9    | 6     | 0    | 39         | 1851       |
| 05:00 PM      | 12                                   | 393  | 15    | 0    | 420        | 2                                    | 304  | 113   | 0    | 419        | 142                         | 9    | 10    | 0    | 161        | 8                            | 6    | 2     | 0    | 16         | 1016       |
| 05:15 PM      | 5                                    | 441  | 32    | 0    | 478        | 1                                    | 318  | 128   | 0    | 447        | 102                         | 5    | 2     | 0    | 109        | 9                            | 8    | 1     | 0    | 18         | 1052       |
| 05:30 PM      | 12                                   | 388  | 30    | 0    | 430        | 3                                    | 267  | 113   | 0    | 383        | 136                         | 13   | 8     | 0    | 157        | 7                            | 5    | 4     | 0    | 16         | 986        |
| 05:45 PM      | 11                                   | 417  | 37    | 0    | 465        | 1                                    | 272  | 109   | 0    | 382        | 138                         | 11   | 6     | 0    | 155        | 12                           | 8    | 0     | 0    | 20         | 1022       |
| Total         | 40                                   | 1639 | 114   | 0    | 1793       | 7                                    | 1161 | 463   | 0    | 1631       | 518                         | 38   | 26    | 0    | 582        | 36                           | 27   | 7     | 0    | 70         | 4076       |
| 06:00 PM      | 12                                   | 356  | 17    | 0    | 385        | 4                                    | 284  | 150   | 0    | 438        | 108                         | 2    | 11    | 0    | 121        | 16                           | 5    | 1     | 0    | 22         | 966        |
| 06:15 PM      | 10                                   | 334  | 18    | 0    | 362        | 5                                    | 269  | 120   | 0    | 394        | 126                         | 4    | 0     | 0    | 130        | 17                           | 6    | 1     | 0    | 24         | 910        |
| Grand Total   | 105                                  | 4403 | 227   | 0    | 4735       | 26                                   | 4592 | 1566  | 0    | 6184       | 1228                        | 55   | 68    | 0    | 1351       | 96                           | 53   | 19    | 0    | 168        | 12438      |
| Apprch %      | 2.2                                  | 93   | 4.8   | 0    |            | 0.4                                  | 74.3 | 25.3  | 0    |            | 90.9                        | 4.1  | 5     | 0    |            | 57.1                         | 31.5 | 11.3  | 0    |            |            |
| Total %       | 0.8                                  | 35.4 | 1.8   | 0    | 38.1       | 0.2                                  | 36.9 | 12.6  | 0    | 49.7       | 9.9                         | 0.4  | 0.5   | 0    | 10.9       | 0.8                          | 0.4  | 0.2   | 0    | 1.4        |            |

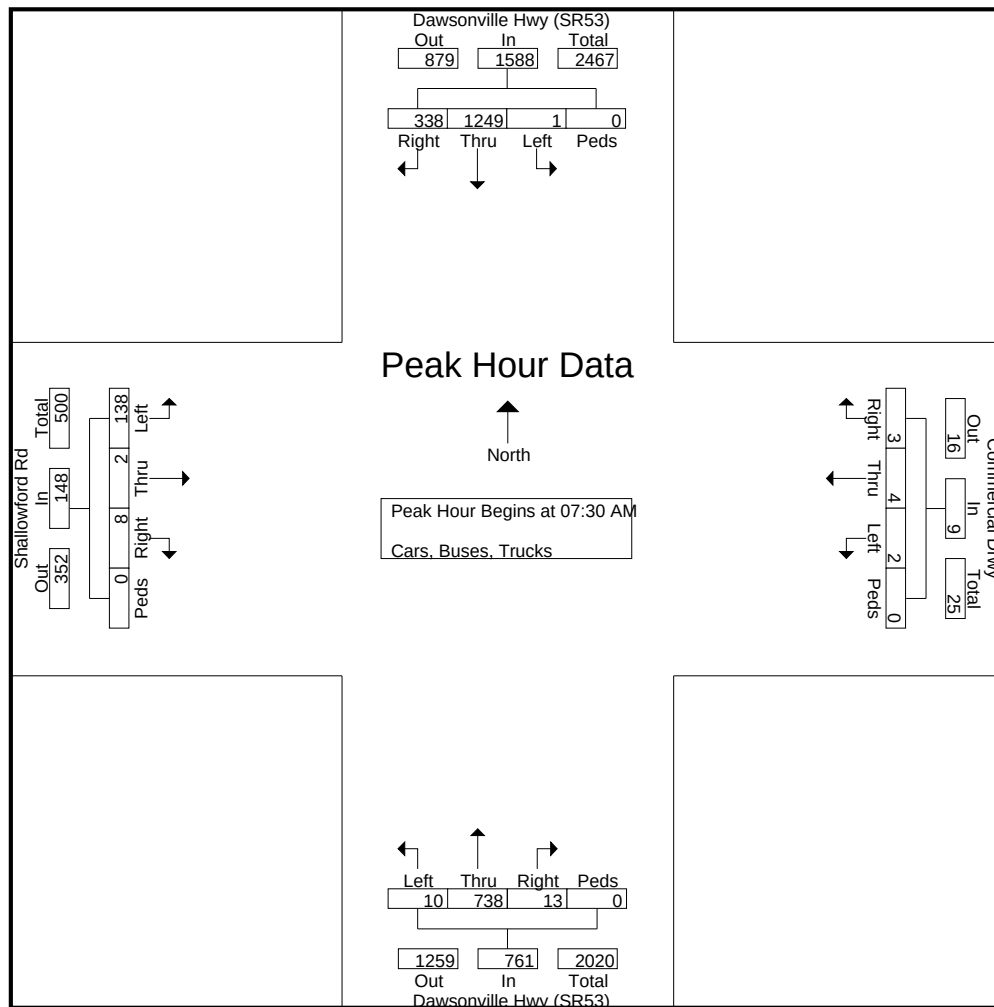
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Dawsonville Hwy (SR53) @  
Shallowford Rd, Gainesville, GA  
7-9am | 4.30-6.30pm

File Name : 39520009  
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Start Date : 11/17/2016  
Page No : 2

|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Shallowford Rd<br>Eastbound |      |       |      |            | Commercial Drwy<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|-----------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                        | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                             |      |       |      |            |                              |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                                      |      |       |      |            |                                      |      |       |      |            |                             |      |       |      |            |                              |      |       |      |            |            |
| 07:30 AM                                                   | 3                                    | 146  | 1     | 0    | 150        | 0                                    | 334  | 82    | 0    | 416        | 28                          | 0    | 4     | 0    | 32         | 0                            | 1    | 2     | 0    | 3          | 601        |
| 07:45 AM                                                   | 3                                    | 178  | 6     | 0    | 187        | 0                                    | 342  | 85    | 0    | 427        | 35                          | 0    | 2     | 0    | 37         | 0                            | 0    | 0     | 0    | 0          | 651        |
| 08:00 AM                                                   | 3                                    | 188  | 3     | 0    | 194        | 0                                    | 307  | 87    | 0    | 394        | 34                          | 1    | 0     | 0    | 35         | 0                            | 1    | 1     | 0    | 2          | 625        |
| 08:15 AM                                                   | 1                                    | 226  | 3     | 0    | 230        | 1                                    | 266  | 84    | 0    | 351        | 41                          | 1    | 2     | 0    | 44         | 2                            | 2    | 0     | 0    | 4          | 629        |
| Total Volume                                               | 10                                   | 738  | 13    | 0    | 761        | 1                                    | 1249 | 338   | 0    | 1588       | 138                         | 2    | 8     | 0    | 148        | 2                            | 4    | 3     | 0    | 9          | 2506       |
| % App. Total                                               | 1.3                                  | 97   | 1.7   | 0    |            | 0.1                                  | 78.7 | 21.3  | 0    |            | 93.2                        | 1.4  | 5.4   | 0    |            | 22.2                         | 44.4 | 33.3  | 0    |            |            |
| PHF                                                        | .833                                 | .816 | .542  | .000 | .827       | .250                                 | .913 | .971  | .000 | .930       | .841                        | .500 | .500  | .000 | .841       | .250                         | .500 | .375  | .000 | .563       | .962       |



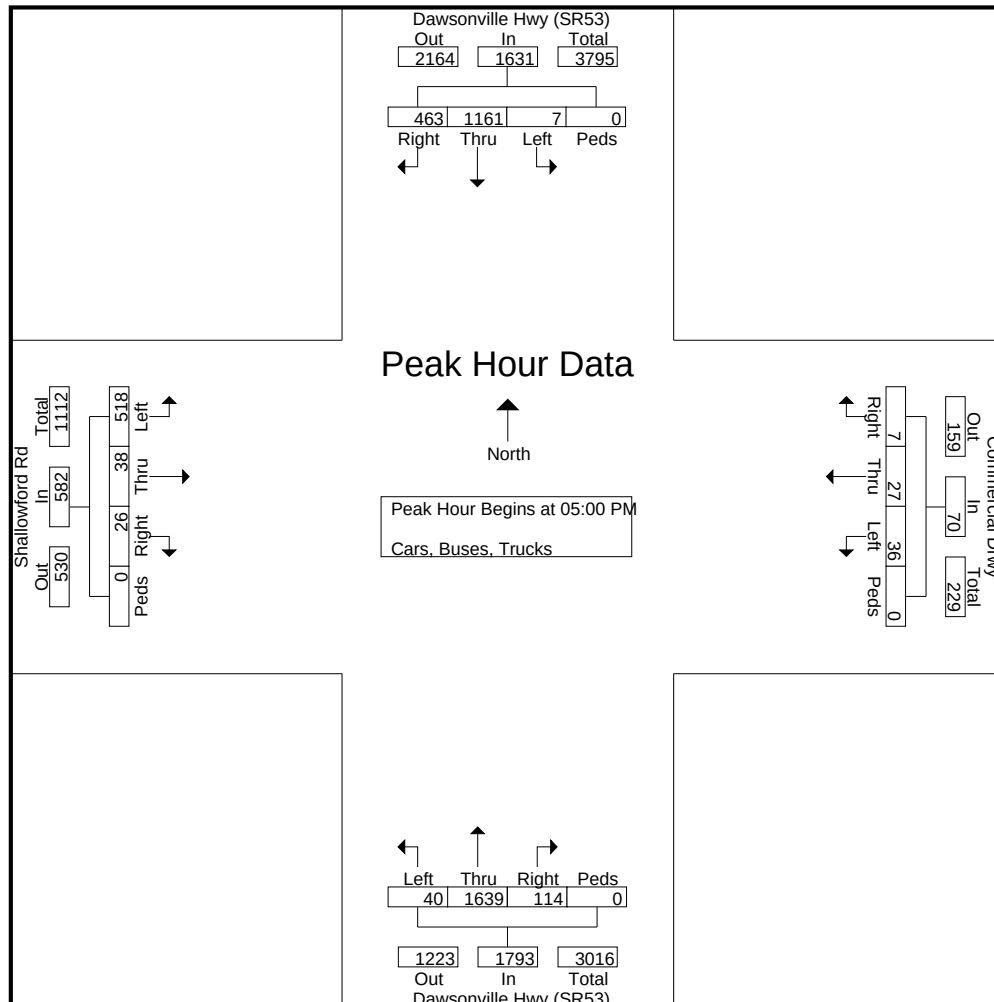
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|                                                            | Dawsonville Hwy (SR53)<br>Northbound |      |       |      |            | Dawsonville Hwy (SR53)<br>Southbound |      |       |      |            | Shallowford Rd<br>Eastbound |      |       |      |            | Commercial Drwy<br>Westbound |      |       |      |            |            |
|------------------------------------------------------------|--------------------------------------|------|-------|------|------------|--------------------------------------|------|-------|------|------------|-----------------------------|------|-------|------|------------|------------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                                 | Thru | Right | Peds | App. Total | Left                                 | Thru | Right | Peds | App. Total | Left                        | Thru | Right | Peds | App. Total | Left                         | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1 |                                      |      |       |      |            |                                      |      |       |      |            |                             |      |       |      |            |                              |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                                      |      |       |      |            |                                      |      |       |      |            |                             |      |       |      |            |                              |      |       |      |            |            |
| 05:00 PM                                                   | 12                                   | 393  | 15    | 0    | 420        | 2                                    | 304  | 113   | 0    | 419        | 142                         | 9    | 10    | 0    | 161        | 8                            | 6    | 2     | 0    | 16         | 1016       |
| 05:15 PM                                                   | 5                                    | 441  | 32    | 0    | 478        | 1                                    | 318  | 128   | 0    | 447        | 102                         | 5    | 2     | 0    | 109        | 9                            | 8    | 1     | 0    | 18         | 1052       |
| 05:30 PM                                                   | 12                                   | 388  | 30    | 0    | 430        | 3                                    | 267  | 113   | 0    | 383        | 136                         | 13   | 8     | 0    | 157        | 7                            | 5    | 4     | 0    | 16         | 986        |
| 05:45 PM                                                   | 11                                   | 417  | 37    | 0    | 465        | 1                                    | 272  | 109   | 0    | 382        | 138                         | 11   | 6     | 0    | 155        | 12                           | 8    | 0     | 0    | 20         | 1022       |
| Total Volume                                               | 40                                   | 1639 | 114   | 0    | 1793       | 7                                    | 1161 | 463   | 0    | 1631       | 518                         | 38   | 26    | 0    | 582        | 36                           | 27   | 7     | 0    | 70         | 4076       |
| % App. Total                                               | 2.2                                  | 91.4 | 6.4   | 0    |            | 0.4                                  | 71.2 | 28.4  | 0    |            | 89                          | 6.5  | 4.5   | 0    |            | 51.4                         | 38.6 | 10    | 0    |            |            |
| PHF                                                        | .833                                 | .929 | .770  | .000 | .938       | .583                                 | .913 | .904  | .000 | .912       | .912                        | .731 | .650  | .000 | .904       | .750                         | .844 | .438  | .000 | .875       | .969       |



## Appendix B

### Intersection Analysis Methodology

# Intersection Analysis Methodology

The methodology used for evaluating traffic operations at intersections is presented in the Transportation Research Board’s *Highway Capacity Manual*, 2010 edition (HCM 2010). Synchro 8 software, which emulates the HCM 2010 methodology, was used for all analyses. The following is an overview of the methodology employed for the analysis of signalized intersections and stop-sign controlled (unsignalized) intersections.

## Signalized Intersections

The criteria for evaluating signalized intersections are capacity and level of service. The capacity analysis of an intersection compares the volume of traffic using the various lane groups at the intersection to the capacity of those lane groups. This produces a volume-to-capacity (v/c) ratio for each lane group. A v/c ratio greater than 1.0 indicates that the volume of traffic has exceeded the capacity available and indicates a temporary excess of demand. The HCM 2010 methodology computes a critical v/c ratio for an intersection based on the critical lane groups or approaches. This critical v/c ratio is an indication of overall intersection sufficiency.

Level of service for a signalized intersection is defined in terms of control delay per vehicle. For signalized intersections, a composite intersection level of service is determined. The thresholds for each level of service are higher for signalized intersections than for unsignalized intersections. This is attributable to a variety of factors including expectation and acceptance of higher delays at signals, and the fact that drivers can relax when waiting at a signal as opposed to having to remain attentive as they proceed through the unsignalized intersection. The level of service criteria for signalized intersections are shown in Table A.

**Table A – Level of Service Criteria for Signalized Intersections**

| Control Delay (s/veh) | Level of Service by Volume-to-Capacity Ratio |      |
|-----------------------|----------------------------------------------|------|
|                       | ≤1.0                                         | >1.0 |
| ≤ 10                  | A                                            | F    |
| > 10 and ≤ 20         | B                                            | F    |
| > 20 and ≤ 35         | C                                            | F    |
| > 35 and ≤ 55         | D                                            | F    |
| > 55 and ≤ 80         | E                                            | F    |
| > 80                  | F                                            | F    |

Source: *Highway Capacity Manual 2010*

## Unsignalized Intersections

The operations at an unsignalized intersection are defined in terms of levels of service. Level of service (LOS) is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. Level of service for an unsignalized intersection is defined in terms of control delay per vehicle. Control delay is that portion of delay attributable to the control device and includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The delays at unsignalized intersections are based on gap acceptance theory,

factoring in availability of gaps, usefulness of the gaps, and the priority of right-of-way given to each traffic stream.

Levels of service are assigned letters A through F. LOS A indicates operations with very low control delay while LOS F describes operations with high control delay. LOS F is considered to be unacceptable by most drivers, while LOS E is typically considered to be the limit of acceptable delay. The level of service criteria for unsignalized intersections are presented in Table B.

**Table B – Level of Service Criteria for Unsignalized Intersections**

| Control Delay (s/veh) | Level of Service by Volume-to-Capacity Ratio |      |
|-----------------------|----------------------------------------------|------|
|                       | ≤1.0                                         | >1.0 |
| 0 – 10                | A                                            | F    |
| > 10 and ≤ 15         | B                                            | F    |
| > 15 and ≤ 25         | C                                            | F    |
| > 25 and ≤ 35         | D                                            | F    |
| > 35 and ≤ 50         | E                                            | F    |
| > 50                  | F                                            | F    |

*Source: Highway Capacity Manual 2010*

## Appendix C

### Existing Intersection Analysis



Lanier Tract DRI  
1: Sportsman Club Road & Strickland Drive

existing a.m.

Intersection

Int Delay, s/veh 2.6

| Movement                 | WBL  | WBR  | NBT  | NBR  | SBL  | SBT  |
|--------------------------|------|------|------|------|------|------|
| Vol, veh/h               | 10   | 0    | 6    | 1    | 0    | 23   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | 0    | -    | -    | 0    |
| Grade, %                 | 0    | -    | 0    | -    | -    | 0    |
| Peak Hour Factor         | 50   | 50   | 58   | 58   | 64   | 64   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 20   | 0    | 10   | 2    | 0    | 36   |

| Major/Minor          | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 47     | 11     | 0      |
| Stage 1              | 11     | -      | -      |
| Stage 2              | 36     | -      | -      |
| Critical Hdwy        | 6.42   | 6.22   | 4.12   |
| Critical Hdwy Stg 1  | 5.42   | -      | -      |
| Critical Hdwy Stg 2  | 5.42   | -      | -      |
| Follow-up Hdwy       | 3.518  | 3.318  | 2.218  |
| Pot Cap-1 Maneuver   | 963    | 1070   | 1607   |
| Stage 1              | 1012   | -      | -      |
| Stage 2              | 986    | -      | -      |
| Platoon blocked, %   | -      | -      | -      |
| Mov Cap-1 Maneuver   | 963    | 1070   | 1607   |
| Mov Cap-2 Maneuver   | 963    | -      | -      |
| Stage 1              | 1012   | -      | -      |
| Stage 2              | 986    | -      | -      |

| Approach             | WB  | NB | SB |
|----------------------|-----|----|----|
| HCM Control Delay, s | 8.8 | 0  | 0  |
| HCM LOS              | A   |    |    |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL  | SBT |
|-----------------------|-----|----------|------|-----|
| Capacity (veh/h)      | -   | - 963    | 1607 | -   |
| HCM Lane V/C Ratio    | -   | - 0.021  | -    | -   |
| HCM Control Delay (s) | -   | - 8.8    | 0    | -   |
| HCM Lane LOS          | -   | - A      | A    | -   |
| HCM 95th %tile Q(veh) | -   | - 0.1    | 0    | -   |

Lanier Tract DRI  
2: GA 53 & Sportsman Club Road

existing a.m.

| Intersection             |        |       |      |        |      |      |        |       |      |        |      |      |
|--------------------------|--------|-------|------|--------|------|------|--------|-------|------|--------|------|------|
| Int Delay, s/veh         |        | 5.3   |      |        |      |      |        |       |      |        |      |      |
|                          |        |       |      |        |      |      |        |       |      |        |      |      |
| Movement                 | EBL    | EBT   | EBR  | WBL    | WBT  | WBR  | NBL    | NBT   | NBR  | SBL    | SBT  | SBR  |
| Vol, veh/h               | 9      | 1687  | 0    | 0      | 743  | 8    | 0      | 0     | 0    | 25     | 0    | 15   |
| Conflicting Peds, #/hr   | 0      | 0     | 0    | 0      | 0    | 0    | 0      | 0     | 0    | 0      | 0    | 0    |
| Sign Control             | Free   | Free  | Free | Free   | Free | Free | Stop   | Stop  | Stop | Stop   | Stop | Stop |
| RT Channelized           | -      | -     | None | -      | -    | None | -      | -     | None | -      | -    | None |
| Storage Length           | 0      | -     | -    | 0      | -    | -    | -      | -     | -    | -      | -    | -    |
| Veh in Median Storage, # | -      | 0     | -    | -      | 0    | -    | -      | 0     | -    | -      | 0    | -    |
| Grade, %                 | -      | 0     | -    | -      | 0    | -    | -      | 0     | -    | -      | 0    | -    |
| Peak Hour Factor         | 86     | 86    | 86   | 84     | 84   | 84   | 92     | 92    | 92   | 59     | 59   | 59   |
| Heavy Vehicles, %        | 2      | 2     | 2    | 2      | 2    | 2    | 2      | 2     | 2    | 2      | 2    | 2    |
| Mvmt Flow                | 10     | 1962  | 0    | 0      | 885  | 10   | 0      | 0     | 0    | 42     | 0    | 25   |
|                          |        |       |      |        |      |      |        |       |      |        |      |      |
| Major/Minor              | Major1 |       |      | Major2 |      |      | Minor1 |       |      | Minor2 |      |      |
| Conflicting Flow All     | 894    | 0     | 0    | 1962   | 0    | 0    | 2425   | 2877  | 981  | 1891   | 2872 | 447  |
| Stage 1                  | -      | -     | -    | -      | -    | -    | 1983   | 1983  | -    | 889    | 889  | -    |
| Stage 2                  | -      | -     | -    | -      | -    | -    | 442    | 894   | -    | 1002   | 1983 | -    |
| Critical Hdwy            | 4.14   | -     | -    | 4.14   | -    | -    | 7.54   | 6.54  | 6.94 | 7.54   | 6.54 | 6.94 |
| Critical Hdwy Stg 1      | -      | -     | -    | -      | -    | -    | 6.54   | 5.54  | -    | 6.54   | 5.54 | -    |
| Critical Hdwy Stg 2      | -      | -     | -    | -      | -    | -    | 6.54   | 5.54  | -    | 6.54   | 5.54 | -    |
| Follow-up Hdwy           | 2.22   | -     | -    | 2.22   | -    | -    | 3.52   | 4.02  | 3.32 | 3.52   | 4.02 | 3.32 |
| Pot Cap-1 Maneuver       | 755    | -     | -    | 293    | -    | -    | 17     | 16    | 249  | 43     | 16   | 559  |
| Stage 1                  | -      | -     | -    | -      | -    | -    | 63     | 105   | -    | 304    | 360  | -    |
| Stage 2                  | -      | -     | -    | -      | -    | -    | 564    | 358   | -    | 260    | 105  | -    |
| Platoon blocked, %       |        | -     | -    |        | -    | -    |        |       |      |        |      |      |
| Mov Cap-1 Maneuver       | 755    | -     | -    | 293    | -    | -    | 16     | 16    | 249  | 43     | 16   | 559  |
| Mov Cap-2 Maneuver       | -      | -     | -    | -      | -    | -    | 16     | 16    | -    | 43     | 16   | -    |
| Stage 1                  | -      | -     | -    | -      | -    | -    | 62     | 104   | -    | 300    | 360  | -    |
| Stage 2                  | -      | -     | -    | -      | -    | -    | 538    | 358   | -    | 257    | 104  | -    |
|                          |        |       |      |        |      |      |        |       |      |        |      |      |
| Approach                 | EB     |       |      | WB     |      |      | NB     |       |      | SB     |      |      |
| HCM Control Delay, s     | 0.1    |       |      | 0      |      |      | 0      |       |      | 224.6  |      |      |
| HCM LOS                  |        |       |      |        |      |      | A      |       |      | F      |      |      |
|                          |        |       |      |        |      |      |        |       |      |        |      |      |
| Minor Lane/Major Mvmt    | NBLn1  | EBL   | EBT  | EBR    | WBL  | WBT  | WBR    | SBLn1 |      |        |      |      |
| Capacity (veh/h)         | -      | 755   | -    | -      | 293  | -    | -      | 66    |      |        |      |      |
| HCM Lane V/C Ratio       | -      | 0.014 | -    | -      | -    | -    | -      | 1.027 |      |        |      |      |
| HCM Control Delay (s)    | 0      | 9.8   | -    | -      | 0    | -    | -      | 224.6 |      |        |      |      |
| HCM Lane LOS             | A      | A     | -    | -      | A    | -    | -      | F     |      |        |      |      |
| HCM 95th %tile Q(veh)    | -      | 0     | -    | -      | 0    | -    | -      | 5.2   |      |        |      |      |

Lanier Tract DRI  
3: GA 53 & Avonlea Way

existing a.m.

| Intersection             |        |        |       |        |      |      |
|--------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh         | 2.5    |        |       |        |      |      |
| Movement                 | EBL    | EBR    | NBL   | NBT    | SBT  | SBR  |
| Vol, veh/h               | 15     | 72     | 12    | 758    | 1668 | 6    |
| Conflicting Peds, #/hr   | 0      | 0      | 0     | 0      | 0    | 0    |
| Sign Control             | Stop   | Stop   | Free  | Free   | Free | Free |
| RT Channelized           | -      | None   | -     | None   | -    | None |
| Storage Length           | 0      | 0      | 0     | -      | -    | 0    |
| Veh in Median Storage, # | 0      | -      | -     | 0      | 0    | -    |
| Grade, %                 | 0      | -      | -     | 0      | 0    | -    |
| Peak Hour Factor         | 84     | 84     | 88    | 88     | 86   | 86   |
| Heavy Vehicles, %        | 2      | 2      | 2     | 2      | 2    | 2    |
| Mvmt Flow                | 18     | 86     | 14    | 861    | 1940 | 7    |
| Major/Minor              | Minor2 | Major1 |       | Major2 |      |      |
| Conflicting Flow All     | 2398   | 970    | 1940  | 0      | -    | 0    |
| Stage 1                  | 1940   | -      | -     | -      | -    | -    |
| Stage 2                  | 458    | -      | -     | -      | -    | -    |
| Critical Hdwy            | 6.84   | 6.94   | 4.14  | -      | -    | -    |
| Critical Hdwy Stg 1      | 5.84   | -      | -     | -      | -    | -    |
| Critical Hdwy Stg 2      | 5.84   | -      | -     | -      | -    | -    |
| Follow-up Hdwy           | 3.52   | 3.32   | 2.22  | -      | -    | -    |
| Pot Cap-1 Maneuver       | 28     | 253    | 299   | -      | -    | -    |
| Stage 1                  | 98     | -      | -     | -      | -    | -    |
| Stage 2                  | 604    | -      | -     | -      | -    | -    |
| Platoon blocked, %       |        |        |       | -      | -    | -    |
| Mov Cap-1 Maneuver       | 27     | 253    | 299   | -      | -    | -    |
| Mov Cap-2 Maneuver       | 27     | -      | -     | -      | -    | -    |
| Stage 1                  | 98     | -      | -     | -      | -    | -    |
| Stage 2                  | 576    | -      | -     | -      | -    | -    |
| Approach                 | EB     | NB     |       | SB     |      |      |
| HCM Control Delay, s     | 69.3   | 0.3    |       | 0      |      |      |
| HCM LOS                  | F      |        |       |        |      |      |
| Minor Lane/Major Mvmt    | NBL    | NBT    | EBLn1 | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)         | 299    | -      | 27    | 253    | -    | -    |
| HCM Lane V/C Ratio       | 0.046  | -      | 0.661 | 0.339  | -    | -    |
| HCM Control Delay (s)    | 17.6   | -      | 275.4 | 26.4   | -    | -    |
| HCM Lane LOS             | C      | -      | F     | D      | -    | -    |
| HCM 95th %tile Q(veh)    | 0.1    | -      | 2.1   | 1.4    | -    | -    |

Lanier Tract DRI  
4: GA 53 & Canterbury Road

existing a.m.

| Intersection             |        |      |        |       |        |      |
|--------------------------|--------|------|--------|-------|--------|------|
| Int Delay, s/veh         | 3.8    |      |        |       |        |      |
|                          |        |      |        |       |        |      |
| Movement                 | EBL    | EBR  | NBL    | NBT   | SBT    | SBR  |
| Vol, veh/h               | 18     | 95   | 23     | 722   | 1782   | 7    |
| Conflicting Peds, #/hr   | 0      | 0    | 0      | 0     | 0      | 0    |
| Sign Control             | Stop   | Stop | Free   | Free  | Free   | Free |
| RT Channelized           | -      | None | -      | None  | -      | None |
| Storage Length           | 0      | 0    | 0      | -     | -      | 0    |
| Veh in Median Storage, # | 0      | -    | -      | 0     | 0      | -    |
| Grade, %                 | 0      | -    | -      | 0     | 0      | -    |
| Peak Hour Factor         | 88     | 88   | 86     | 86    | 91     | 91   |
| Heavy Vehicles, %        | 2      | 2    | 2      | 2     | 2      | 2    |
| Mvmt Flow                | 20     | 108  | 27     | 840   | 1958   | 8    |
|                          |        |      |        |       |        |      |
| Major/Minor              | Minor2 |      | Major1 |       | Major2 |      |
| Conflicting Flow All     | 2431   | 979  | 1958   | 0     | -      | 0    |
| Stage 1                  | 1958   | -    | -      | -     | -      | -    |
| Stage 2                  | 473    | -    | -      | -     | -      | -    |
| Critical Hdwy            | 6.84   | 6.94 | 4.14   | -     | -      | -    |
| Critical Hdwy Stg 1      | 5.84   | -    | -      | -     | -      | -    |
| Critical Hdwy Stg 2      | 5.84   | -    | -      | -     | -      | -    |
| Follow-up Hdwy           | 3.52   | 3.32 | 2.22   | -     | -      | -    |
| Pot Cap-1 Maneuver       | 26     | 249  | 294    | -     | -      | -    |
| Stage 1                  | 96     | -    | -      | -     | -      | -    |
| Stage 2                  | 593    | -    | -      | -     | -      | -    |
| Platoon blocked, %       |        |      |        | -     | -      | -    |
| Mov Cap-1 Maneuver       | 24     | 249  | 294    | -     | -      | -    |
| Mov Cap-2 Maneuver       | 24     | -    | -      | -     | -      | -    |
| Stage 1                  | 96     | -    | -      | -     | -      | -    |
| Stage 2                  | 539    | -    | -      | -     | -      | -    |
|                          |        |      |        |       |        |      |
| Approach                 | EB     |      | NB     |       | SB     |      |
| HCM Control Delay, s     | 83.3   |      | 0.6    |       | 0      |      |
| HCM LOS                  | F      |      |        |       |        |      |
|                          |        |      |        |       |        |      |
| Minor Lane/Major Mvmt    | NBL    | NBT  | EBLn1  | EBLn2 | SBT    | SBR  |
| Capacity (veh/h)         | 294    | -    | 24     | 249   | -      | -    |
| HCM Lane V/C Ratio       | 0.091  | -    | 0.852  | 0.434 | -      | -    |
| HCM Control Delay (s)    | 18.5   | -\$  | 363.9  | 30.1  | -      | -    |
| HCM Lane LOS             | C      | -    | F      | D     | -      | -    |
| HCM 95th %tile Q(veh)    | 0.3    | -    | 2.6    | 2.1   | -      | -    |

Lanier Tract DRI  
7: GA 53 & Beechwood Boulevard

existing a.m.

| Intersection             |        |        |       |        |      |      |
|--------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh         | 1.4    |        |       |        |      |      |
| Movement                 | EBL    | EBR    | NBL   | NBT    | SBT  | SBR  |
| Vol, veh/h               | 5      | 41     | 27    | 787    | 2006 | 2    |
| Conflicting Peds, #/hr   | 0      | 0      | 0     | 0      | 0    | 0    |
| Sign Control             | Stop   | Stop   | Free  | Free   | Free | Free |
| RT Channelized           | -      | Yield  | -     | Yield  | -    | None |
| Storage Length           | 0      | 0      | 200   | -      | -    | 360  |
| Veh in Median Storage, # | 0      | -      | -     | 0      | 0    | -    |
| Grade, %                 | 0      | -      | -     | 1      | 0    | -    |
| Peak Hour Factor         | 82     | 82     | 87    | 87     | 89   | 89   |
| Heavy Vehicles, %        | 0      | 0      | 0     | 1      | 0    | 0    |
| Mvmt Flow                | 6      | 50     | 31    | 905    | 2254 | 2    |
| Major/Minor              | Minor2 | Major1 |       | Major2 |      |      |
| Conflicting Flow All     | 2768   | 1127   | 2254  | 0      | -    | 0    |
| Stage 1                  | 2254   | -      | -     | -      | -    | -    |
| Stage 2                  | 514    | -      | -     | -      | -    | -    |
| Critical Hdwy            | 6.8    | 6.9    | 4.1   | -      | -    | -    |
| Critical Hdwy Stg 1      | 5.8    | -      | -     | -      | -    | -    |
| Critical Hdwy Stg 2      | 5.8    | -      | -     | -      | -    | -    |
| Follow-up Hdwy           | 3.5    | 3.3    | 2.2   | -      | -    | -    |
| Pot Cap-1 Maneuver       | 16     | 202    | 231   | -      | -    | -    |
| Stage 1                  | 67     | -      | -     | -      | -    | -    |
| Stage 2                  | 571    | -      | -     | -      | -    | -    |
| Platoon blocked, %       |        |        |       | -      | -    | -    |
| Mov Cap-1 Maneuver       | 14     | 202    | 231   | -      | -    | -    |
| Mov Cap-2 Maneuver       | 14     | -      | -     | -      | -    | -    |
| Stage 1                  | 67     | -      | -     | -      | -    | -    |
| Stage 2                  | 494    | -      | -     | -      | -    | -    |
| Approach                 | EB     | NB     |       | SB     |      |      |
| HCM Control Delay, s     | 68.2   | 0.8    |       | 0      |      |      |
| HCM LOS                  | F      |        |       |        |      |      |
| Minor Lane/Major Mvmt    | NBL    | NBT    | EBLn1 | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)         | 231    | -      | 14    | 202    | -    | -    |
| HCM Lane V/C Ratio       | 0.134  | -      | 0.436 | 0.248  | -    | -    |
| HCM Control Delay (s)    | 23     | -      | 393.1 | 28.6   | -    | -    |
| HCM Lane LOS             | C      | -      | F     | D      | -    | -    |
| HCM 95th %tile Q(veh)    | 0.5    | -      | 1.1   | 0.9    | -    | -    |

# Lanier Tract DRI

## 5: GA 53 & Lanier Valley Dr/Ahaluna Dr

existing a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Volume (vph)               | 19                                                                                | 5                                                                                 | 115                                                                               | 37                                                                                | 3                                                                                 | 20                                                                                | 55                                                                                  | 701                                                                                 | 11                                                                                  | 14                                                                                  | 1901                                                                                | 0                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 2%                                                                                |                                                                                   |                                                                                   | -4%                                                                               |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 100                                                                                 |                                                                                     | 0                                                                                   | 140                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.888                                                                             |                                                                                   |                                                                                   | 0.956                                                                             |                                                                                   |                                                                                     | 0.998                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   | 0.993                                                                             |                                                                                   |                                                                                   | 0.970                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1659                                                                              | 0                                                                                 | 0                                                                                 | 1797                                                                              | 0                                                                                 | 1796                                                                                | 3516                                                                                | 0                                                                                   | 1814                                                                                | 3628                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.941                                                                             |                                                                                   |                                                                                   | 0.405                                                                             |                                                                                   | 0.037                                                                               |                                                                                     |                                                                                     | 0.337                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1572                                                                              | 0                                                                                 | 0                                                                                 | 750                                                                               | 0                                                                                 | 70                                                                                  | 3516                                                                                | 0                                                                                   | 644                                                                                 | 3628                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 86                                                                                |                                                                                   |                                                                                   | 13                                                                                |                                                                                   |                                                                                     | 4                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 340                                                                               |                                                                                   |                                                                                   | 322                                                                               |                                                                                   |                                                                                     | 888                                                                                 |                                                                                     |                                                                                     | 1417                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.7                                                                               |                                                                                   |                                                                                   | 7.3                                                                               |                                                                                   |                                                                                     | 13.5                                                                                |                                                                                     |                                                                                     | 21.5                                                                                |                                                                                     |
| Peak Hour Factor           | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.83                                                                              | 0.83                                                                              | 0.83                                                                              | 0.85                                                                                | 0.85                                                                                | 0.85                                                                                | 0.87                                                                                | 0.87                                                                                | 0.87                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 21                                                                                | 5                                                                                 | 126                                                                               | 45                                                                                | 4                                                                                 | 24                                                                                | 65                                                                                  | 825                                                                                 | 13                                                                                  | 16                                                                                  | 2185                                                                                | 0                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 152                                                                               | 0                                                                                 | 0                                                                                 | 73                                                                                | 0                                                                                 | 65                                                                                  | 838                                                                                 | 0                                                                                   | 16                                                                                  | 2185                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 |                                                                                     | 0                                                                                   | 336                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   |                                                                                     | 0                                                                                   | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 8                                                                                 | 8                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 10.6                                                                                | 23.0                                                                                |                                                                                     | 23.0                                                                                | 23.0                                                                                |                                                                                     |

# Lanier Tract DRI

## 5: GA 53 & Lanier Valley Dr/Ahaluna Dr

existing a.m.

|                       |  |       |     |       |       |     |       |       |     |       |       |     |
|-----------------------|------------------------------------------------------------------------------------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Lane Group            | EBL                                                                                | EBT   | EBR | WBL   | WBT   | WBR | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
| Total Split (s)       | 25.0                                                                               | 25.0  |     | 25.0  | 25.0  |     | 13.0  | 125.0 |     | 112.0 | 112.0 |     |
| Total Split (%)       | 16.7%                                                                              | 16.7% |     | 16.7% | 16.7% |     | 8.7%  | 83.3% |     | 74.7% | 74.7% |     |
| Maximum Green (s)     | 18.4                                                                               | 18.4  |     | 18.4  | 18.4  |     | 7.4   | 118.9 |     | 105.9 | 105.9 |     |
| Yellow Time (s)       | 4.0                                                                                | 4.0   |     | 4.0   | 4.0   |     | 3.0   | 4.5   |     | 4.5   | 4.5   |     |
| All-Red Time (s)      | 2.6                                                                                | 2.6   |     | 2.6   | 2.6   |     | 2.6   | 1.6   |     | 1.6   | 1.6   |     |
| Lost Time Adjust (s)  |                                                                                    | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Lost Time (s)   |                                                                                    | 6.6   |     |       | 6.6   |     | 5.6   | 6.1   |     | 6.1   | 6.1   |     |
| Lead/Lag              |                                                                                    |       |     |       |       |     | Lead  |       |     | Lag   | Lag   |     |
| Lead-Lag Optimize?    |                                                                                    |       |     |       |       |     | Yes   |       |     | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0                                                                                | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode           | None                                                                               | None  |     | None  | None  |     | None  | C-Max |     | C-Max | C-Max |     |
| Act Effect Green (s)  |                                                                                    | 14.0  |     |       | 14.0  |     | 123.8 | 123.3 |     | 113.3 | 113.3 |     |
| Actuated g/C Ratio    |                                                                                    | 0.09  |     |       | 0.09  |     | 0.83  | 0.82  |     | 0.76  | 0.76  |     |
| v/c Ratio             |                                                                                    | 0.68  |     |       | 0.90  |     | 0.49  | 0.29  |     | 0.03  | 0.80  |     |
| Control Delay         |                                                                                    | 43.6  |     |       | 127.8 |     | 44.3  | 1.5   |     | 6.6   | 15.9  |     |
| Queue Delay           |                                                                                    | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay           |                                                                                    | 43.6  |     |       | 127.8 |     | 44.3  | 1.5   |     | 6.6   | 15.9  |     |
| LOS                   |                                                                                    | D     |     |       | F     |     | D     | A     |     | A     | B     |     |
| Approach Delay        |                                                                                    | 43.6  |     |       | 127.8 |     |       | 4.6   |     |       | 15.9  |     |
| Approach LOS          |                                                                                    | D     |     |       | F     |     |       | A     |     |       | B     |     |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 26 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 16.5

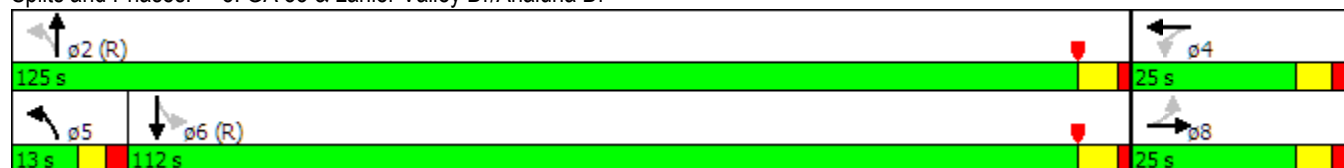
Intersection LOS: B

Intersection Capacity Utilization 73.2%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 5: GA 53 & Lanier Valley Dr/Ahaluna Dr



## Lanier Tract DRI

## 6: 53-Dawsonville Hwy &amp; Academy Sports

existing a.m.

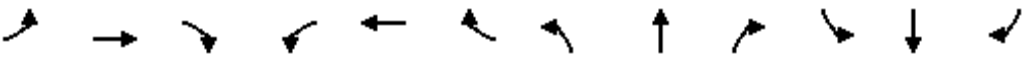
|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |  |  |  |  |  |  |  |
| Volume (vph)               | 2                                                                                 | 0                                                                                 | 6                                                                                 | 2                                                                                 | 0                                                                                 | 0                                                                                 | 11                                                                                  | 740                                                                                 | 9                                                                                   | 5                                                                                   | 1989                                                                                | 4                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 4%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 70                                                                                | 200                                                                                 |                                                                                     | 170                                                                                 | 190                                                                                 |                                                                                     | 360                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1805                                                                              | 1900                                                                              | 1615                                                                              | 1769                                                                              | 1862                                                                              | 1862                                                                              | 1796                                                                                | 3556                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 0.058                                                                               |                                                                                     |                                                                                     | 0.329                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1900                                                                              | 1900                                                                              | 1615                                                                              | 1862                                                                              | 1862                                                                              | 1862                                                                              | 110                                                                                 | 3556                                                                                | 1607                                                                                | 625                                                                                 | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 67                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 68                                                                                  |                                                                                     |                                                                                     | 68                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 262                                                                               |                                                                                   |                                                                                   | 246                                                                               |                                                                                   |                                                                                     | 1836                                                                                |                                                                                     |                                                                                     | 685                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.1                                                                               |                                                                                   |                                                                                   | 6.7                                                                               |                                                                                   |                                                                                     | 27.8                                                                                |                                                                                     |                                                                                     | 10.4                                                                                |                                                                                     |
| Peak Hour Factor           | 0.67                                                                              | 0.67                                                                              | 0.67                                                                              | 0.50                                                                              | 0.50                                                                              | 0.50                                                                              | 0.86                                                                                | 0.86                                                                                | 0.86                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 3                                                                                 | 0                                                                                 | 9                                                                                 | 4                                                                                 | 0                                                                                 | 0                                                                                 | 13                                                                                  | 860                                                                                 | 10                                                                                  | 6                                                                                   | 2210                                                                                | 4                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 3                                                                                 | 0                                                                                 | 9                                                                                 | 4                                                                                 | 0                                                                                 | 0                                                                                 | 13                                                                                  | 860                                                                                 | 10                                                                                  | 6                                                                                   | 2210                                                                                | 4                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              |                                                                                   | Perm                                                                              | Perm                                                                              |                                                                                   | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 2                                                                                   |                                                                                     | 2                                                                                   | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 42.0                                                                              | 42.0                                                                              | 42.0                                                                              | 42.4                                                                              | 42.4                                                                              | 42.4                                                                              | 11.4                                                                                | 30.3                                                                                | 30.3                                                                                | 11.0                                                                                | 29.3                                                                                | 29.3                                                                                |



# Lanier Tract DRI

## 6: 53-Dawsonville Hwy & Academy Sports

existing a.m.

|                         |  |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 42.4                                                                               | 42.4  | 42.4  | 42.4  | 42.4  | 42.4  | 11.4  | 96.6  | 96.6  | 11.0  | 96.2  | 96.2  |
| Total Split (%)         | 28.3%                                                                              | 28.3% | 28.3% | 28.3% | 28.3% | 28.3% | 7.6%  | 64.4% | 64.4% | 7.3%  | 64.1% | 64.1% |
| Maximum Green (s)       | 36.0                                                                               | 36.0  | 36.0  | 36.0  | 36.0  | 36.0  | 5.0   | 90.4  | 90.4  | 5.0   | 90.0  | 90.0  |
| Yellow Time (s)         | 3.4                                                                                | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 4.3   | 4.3   | 3.0   | 4.3   | 4.3   |
| All-Red Time (s)        | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 1.9   | 1.9   | 3.0   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.4                                                                                | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.2   | 6.2   | 6.0   | 6.2   | 6.2   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           | 4.0                                                                                | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 23.0                                                                               | 23.0  | 23.0  | 32.0  | 32.0  | 32.0  |       | 20.0  | 20.0  |       | 19.0  | 19.0  |
| Pedestrian Calls (#/hr) | 0                                                                                  | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    | 6.1                                                                                |       | 6.1   | 6.1   |       |       | 137.2 | 139.9 | 139.9 | 136.1 | 137.4 | 137.4 |
| Actuated g/C Ratio      | 0.04                                                                               |       | 0.04  | 0.04  |       |       | 0.91  | 0.93  | 0.93  | 0.91  | 0.92  | 0.92  |
| v/c Ratio               | 0.04                                                                               |       | 0.07  | 0.05  |       |       | 0.08  | 0.26  | 0.01  | 0.01  | 0.67  | 0.00  |
| Control Delay           | 69.5                                                                               |       | 1.0   | 70.0  |       |       | 1.5   | 0.8   | 0.0   | 1.0   | 1.8   | 0.0   |
| Queue Delay             | 0.0                                                                                |       | 0.0   | 0.0   |       |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay             | 69.5                                                                               |       | 1.0   | 70.0  |       |       | 1.5   | 0.8   | 0.0   | 1.0   | 1.9   | 0.0   |
| LOS                     | E                                                                                  |       | A     | E     |       |       | A     | A     | A     | A     | A     | A     |
| Approach Delay          |                                                                                    |       |       |       |       |       |       | 0.8   |       |       | 1.8   |       |
| Approach LOS            |                                                                                    |       |       |       |       |       |       | A     |       |       | A     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 27 (18%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 145

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.67

Intersection Signal Delay: 1.7

Intersection LOS: A

Intersection Capacity Utilization 79.1%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 6: 53-Dawsonville Hwy & Academy Sports

|                                                                                        |                                                                                            |                                                                                          |
|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
|  p1 |  p2 (R) |  p4 |
| 11 s                                                                                   | 96.6 s                                                                                     | 42.4 s                                                                                   |
|  p5 |  p6 (R) |  p8 |
| 11.4 s                                                                                 | 96.2 s                                                                                     | 42.4 s                                                                                   |

## Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 &amp; McEver Road/McEver

existing a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |                                                                                   |   |  |  |  |  |  |
| Volume (vph)               | 390                                                                               | 28                                                                                | 342                                                                               | 42                                                                                | 19                                                                                | 18                                                                                | 282                                                                                 | 465                                                                                 | 55                                                                                  | 28                                                                                  | 1170                                                                                | 828                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 1%                                                                                |                                                                                   |                                                                                   | 5%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 180                                                                               |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 310                                                                                 |                                                                                     | 185                                                                                 | 255                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 50                                                                                |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.872                                                                             | 0.850                                                                             |                                                                                   | 0.927                                                                             |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 3484                                                                              | 1566                                                                              | 1527                                                                              | 1760                                                                              | 1717                                                                              | 0                                                                                 | 3484                                                                                | 3487                                                                                | 1575                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   | 0.629                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 3484                                                                              | 1566                                                                              | 1527                                                                              | 1165                                                                              | 1717                                                                              | 0                                                                                 | 3484                                                                                | 3487                                                                                | 1575                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 166                                                                               | 187                                                                               |                                                                                   | 29                                                                                |                                                                                   |                                                                                     |                                                                                     | 184                                                                                 |                                                                                     |                                                                                     | 538                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 45                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 580                                                                               |                                                                                   |                                                                                   | 331                                                                               |                                                                                   |                                                                                     | 921                                                                                 |                                                                                     |                                                                                     | 1624                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 8.8                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                     | 14.0                                                                                |                                                                                     |                                                                                     | 24.6                                                                                |                                                                                     |
| Peak Hour Factor           | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.62                                                                              | 0.62                                                                              | 0.62                                                                              | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 3%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 402                                                                               | 29                                                                                | 353                                                                               | 68                                                                                | 31                                                                                | 29                                                                                | 303                                                                                 | 500                                                                                 | 59                                                                                  | 31                                                                                  | 1300                                                                                | 920                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   | 47%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 402                                                                               | 195                                                                               | 187                                                                               | 68                                                                                | 60                                                                                | 0                                                                                 | 303                                                                                 | 500                                                                                 | 59                                                                                  | 31                                                                                  | 1300                                                                                | 920                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 24                                                                                |                                                                                   |                                                                                   | 24                                                                                |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                             | NA                                                                                |                                                                                   | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 8                                                                                 |                                                                                   | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 8                                                                                 | 8                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 13.2                                                                              | 50.2                                                                              | 50.2                                                                              | 11.6                                                                              | 48.2                                                                              |                                                                                   | 13.4                                                                                | 35.6                                                                                | 35.6                                                                                | 12.9                                                                                | 44.6                                                                                | 44.6                                                                                |

# Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 & McEver Road/McEver

existing a.m.

|                         |  |       |       |      |       |     |       |       |       |      |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|------|-------|-----|-------|-------|-------|------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL  | WBT   | WBR | NBL   | NBT   | NBR   | SBL  | SBT   | SBR   |
| Total Split (s)         | 24.0                                                                               | 60.4  | 60.4  | 11.8 | 48.2  |     | 20.2  | 63.9  | 63.9  | 13.9 | 57.6  | 57.6  |
| Total Split (%)         | 16.0%                                                                              | 40.3% | 40.3% | 7.9% | 32.1% |     | 13.5% | 42.6% | 42.6% | 9.3% | 38.4% | 38.4% |
| Maximum Green (s)       | 16.7                                                                               | 53.1  | 53.1  | 5.3  | 40.9  |     | 12.7  | 57.3  | 57.3  | 6.7  | 51.0  | 51.0  |
| Yellow Time (s)         | 4.3                                                                                | 4.3   | 4.3   | 3.5  | 4.3   |     | 4.5   | 4.4   | 4.4   | 4.2  | 4.4   | 4.4   |
| All-Red Time (s)        | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 2.2   | 2.2   | 3.0  | 2.2   | 2.2   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Lost Time (s)     | 7.3                                                                                | 7.3   | 7.3   | 6.5  | 7.3   |     | 7.5   | 6.6   | 6.6   | 7.2  | 6.6   | 6.6   |
| Lead/Lag                | Lead                                                                               | Lag   | Lag   | Lead | Lag   |     | Lag   | Lag   | Lag   | Lead | Lead  | Lead  |
| Lead-Lag Optimize?      | Yes                                                                                | Yes   | Yes   | Yes  | Yes   |     | Yes   | Yes   | Yes   | Yes  | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None | None  |     | None  | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s)           |                                                                                    | 4.0   | 4.0   |      | 4.0   |     |       | 4.0   | 4.0   |      | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    | 38.0  | 38.0  |      | 36.0  |     |       | 25.0  | 25.0  |      | 34.0  | 34.0  |
| Pedestrian Calls (#/hr) |                                                                                    | 0     | 0     |      | 0     |     |       | 0     | 0     |      | 0     | 0     |
| Act Effect Green (s)    | 16.7                                                                               | 20.5  | 20.5  | 13.3 | 8.5   |     | 12.7  | 96.3  | 96.3  | 8.0  | 86.0  | 86.0  |
| Actuated g/C Ratio      | 0.11                                                                               | 0.14  | 0.14  | 0.09 | 0.06  |     | 0.08  | 0.64  | 0.64  | 0.05 | 0.57  | 0.57  |
| v/c Ratio               | 1.04                                                                               | 0.55  | 0.51  | 0.55 | 0.48  |     | 1.03  | 0.22  | 0.05  | 0.32 | 0.63  | 0.79  |
| Control Delay           | 119.1                                                                              | 18.3  | 12.1  | 67.7 | 51.5  |     | 133.7 | 17.6  | 1.2   | 85.8 | 19.6  | 11.3  |
| Queue Delay             | 0.0                                                                                | 0.0   | 0.0   | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Delay             | 119.1                                                                              | 18.3  | 12.1  | 67.7 | 51.5  |     | 133.7 | 17.6  | 1.2   | 85.8 | 19.6  | 11.3  |
| LOS                     | F                                                                                  | B     | B     | E    | D     |     | F     | B     | A     | F    | B     | B     |
| Approach Delay          |                                                                                    | 68.5  |       |      | 60.1  |     |       | 57.3  |       |      | 17.1  |       |
| Approach LOS            |                                                                                    | E     |       |      | E     |     |       | E     |       |      | B     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 19 (13%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.04

Intersection Signal Delay: 37.1

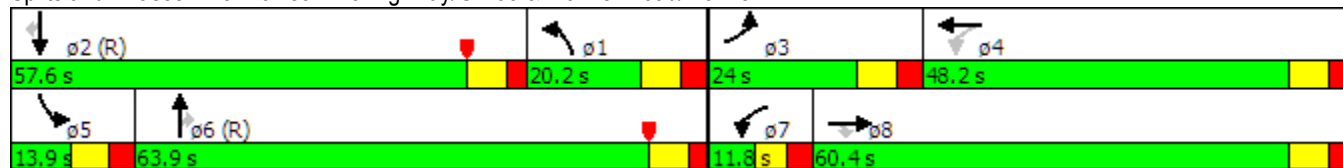
Intersection LOS: D

Intersection Capacity Utilization 81.3%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 8: Dawsonville Highway/GA 53 & McEver Road/McEver



## Lanier Tract DRI

## 9: Dawsonville Highway &amp; Greenhill Circle/Greenhill Circle

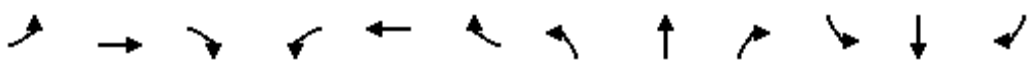
existing a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 67                                                                                | 1                                                                                 | 141                                                                               | 6                                                                                 | 1                                                                                 | 4                                                                                 | 135                                                                                 | 754                                                                                 | 10                                                                                  | 12                                                                                  | 1404                                                                                | 52                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 3%                                                                                |                                                                                   |                                                                                   | 7%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 190                                                                                 |                                                                                     | 190                                                                                 | 185                                                                                 |                                                                                     | 100                                                                                 |
| Storage Lanes              | 0                                                                                 |                                                                                   | 1                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              |                                                                                   | 0.953                                                                             |                                                                                   |                                                                                   | 0.957                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1784                                                                              | 1591                                                                              | 0                                                                                 | 1755                                                                              | 1558                                                                              | 1796                                                                                | 3522                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   | 0.722                                                                             |                                                                                   |                                                                                   | 0.755                                                                             |                                                                                   | 0.116                                                                               |                                                                                     |                                                                                     | 0.324                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1351                                                                              | 1591                                                                              | 0                                                                                 | 1384                                                                              | 1558                                                                              | 219                                                                                 | 3522                                                                                | 1607                                                                                | 616                                                                                 | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 151                                                                               |                                                                                   |                                                                                   | 102                                                                               |                                                                                     |                                                                                     | 57                                                                                  |                                                                                     |                                                                                     | 101                                                                                 |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 288                                                                               |                                                                                   |                                                                                   | 254                                                                               |                                                                                   |                                                                                     | 778                                                                                 |                                                                                     |                                                                                     | 921                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.9                                                                               |                                                                                   |                                                                                   | 6.9                                                                               |                                                                                   |                                                                                     | 11.8                                                                                |                                                                                     |                                                                                     | 14.0                                                                                |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.69                                                                              | 0.69                                                                              | 0.69                                                                              | 0.86                                                                                | 0.86                                                                                | 0.86                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 74                                                                                | 1                                                                                 | 157                                                                               | 9                                                                                 | 1                                                                                 | 6                                                                                 | 157                                                                                 | 877                                                                                 | 12                                                                                  | 13                                                                                  | 1526                                                                                | 57                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 75                                                                                | 157                                                                               | 0                                                                                 | 10                                                                                | 6                                                                                 | 157                                                                                 | 877                                                                                 | 12                                                                                  | 13                                                                                  | 1526                                                                                | 57                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.02                                                                              | 1.02                                                                              | 1.02                                                                              | 1.05                                                                              | 1.05                                                                              | 1.05                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              | 23.0                                                                              | 39.9                                                                              | 39.9                                                                              | 39.9                                                                              | 11.0                                                                                | 28.0                                                                                | 28.0                                                                                | 10.0                                                                                | 36.0                                                                                | 36.0                                                                                |

# Lanier Tract DRI

## 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle

existing a.m.

|                         |  |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 39.9                                                                               | 39.9  | 39.9  | 39.9  | 39.9  | 39.9  | 22.0  | 100.1 | 100.1 | 10.0  | 88.1  | 88.1  |
| Total Split (%)         | 26.6%                                                                              | 26.6% | 26.6% | 26.6% | 26.6% | 26.6% | 14.7% | 66.7% | 66.7% | 6.7%  | 58.7% | 58.7% |
| Maximum Green (s)       | 34.0                                                                               | 34.0  | 34.0  | 34.0  | 34.0  | 34.0  | 16.0  | 94.1  | 94.1  | 5.0   | 82.1  | 82.1  |
| Yellow Time (s)         | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 4.4   | 4.4   | 3.5   | 4.4   | 4.4   |
| All-Red Time (s)        | 2.9                                                                                | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 3.0   | 1.6   | 1.6   | 1.5   | 1.6   | 1.6   |
| Lost Time Adjust (s)    |                                                                                    | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |                                                                                    | 5.9   | 5.9   |       | 5.9   | 5.9   | 6.0   | 6.0   | 6.0   | 5.0   | 6.0   | 6.0   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           |                                                                                    |       |       | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    |       |       | 30.0  | 30.0  | 30.0  |       | 18.0  | 18.0  |       | 26.0  | 26.0  |
| Pedestrian Calls (#/hr) |                                                                                    |       |       | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    |                                                                                    | 13.7  | 13.7  |       | 13.7  | 13.7  | 124.4 | 120.0 | 120.0 | 113.0 | 106.3 | 106.3 |
| Actuated g/C Ratio      |                                                                                    | 0.09  | 0.09  |       | 0.09  | 0.09  | 0.83  | 0.80  | 0.80  | 0.75  | 0.71  | 0.71  |
| v/c Ratio               |                                                                                    | 0.61  | 0.56  |       | 0.08  | 0.03  | 0.51  | 0.31  | 0.01  | 0.03  | 0.60  | 0.05  |
| Control Delay           |                                                                                    | 85.1  | 17.7  |       | 60.9  | 0.2   | 17.8  | 4.2   | 0.0   | 3.6   | 11.3  | 0.4   |
| Queue Delay             |                                                                                    | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay             |                                                                                    | 85.1  | 17.7  |       | 60.9  | 0.2   | 17.8  | 4.2   | 0.0   | 3.6   | 11.4  | 0.4   |
| LOS                     |                                                                                    | F     | B     |       | E     | A     | B     | A     | A     | A     | B     | A     |
| Approach Delay          |                                                                                    | 39.5  |       |       | 38.1  |       |       | 6.2   |       |       | 10.9  |       |
| Approach LOS            |                                                                                    | D     |       |       | D     |       |       | A     |       |       | B     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.61

Intersection Signal Delay: 11.6

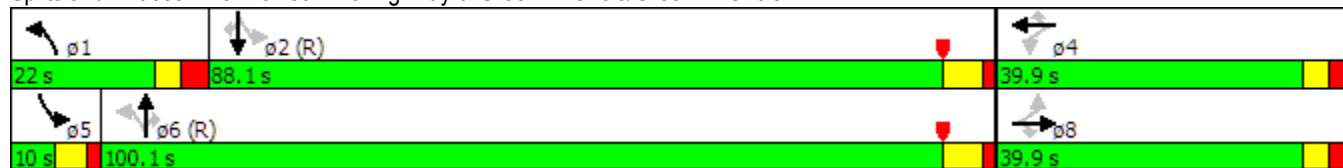
Intersection LOS: B

Intersection Capacity Utilization 71.6%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle



## Lanier Tract DRI

## 10: Dawsonville Highway &amp; Shallowford Rd/Best Buy

existing a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |                                                                                   |  |  |   |  |  |  |  |  |
| Volume (vph)               | 138                                                                               | 2                                                                                 | 8                                                                                 | 2                                                                                 | 4                                                                                 | 3                                                                                 | 10                                                                                  | 738                                                                                 | 13                                                                                  | 1                                                                                   | 1249                                                                                | 338                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | -1%                                                                               |                                                                                   |                                                                                   | 10%                                                                               |                                                                                   |                                                                                     | -4%                                                                                 |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 350                                                                               |                                                                                   | 350                                                                               | 0                                                                                 |                                                                                   | 0                                                                                 | 350                                                                                 |                                                                                     | 150                                                                                 | 265                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 100                                                                               |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             | 0.953                                                                             |                                                                                   |                                                                                   | 0.982                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1723                                                                              | 1729                                                                              | 1623                                                                              | 0                                                                                 | 1773                                                                              | 1534                                                                              | 1841                                                                                | 3646                                                                                | 1647                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             | 0.953                                                                             |                                                                                   |                                                                                   | 0.982                                                                             |                                                                                   | 0.154                                                                               |                                                                                     |                                                                                     | 0.320                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1723                                                                              | 1729                                                                              | 1623                                                                              | 0                                                                                 | 1773                                                                              | 1534                                                                              | 298                                                                                 | 3646                                                                                | 1647                                                                                | 611                                                                                 | 3592                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 113                                                                               |                                                                                   |                                                                                   | 119                                                                               |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     | 218                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 653                                                                               |                                                                                   |                                                                                   | 178                                                                               |                                                                                   |                                                                                     | 957                                                                                 |                                                                                     |                                                                                     | 778                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 9.9                                                                               |                                                                                   |                                                                                   | 4.9                                                                               |                                                                                   |                                                                                     | 14.5                                                                                |                                                                                     |                                                                                     | 11.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.84                                                                              | 0.84                                                                              | 0.84                                                                              | 0.56                                                                              | 0.56                                                                              | 0.56                                                                              | 0.83                                                                                | 0.83                                                                                | 0.83                                                                                | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 164                                                                               | 2                                                                                 | 10                                                                                | 4                                                                                 | 7                                                                                 | 5                                                                                 | 12                                                                                  | 889                                                                                 | 16                                                                                  | 1                                                                                   | 1343                                                                                | 363                                                                                 |
| Shared Lane Traffic (%)    | 49%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 84                                                                                | 82                                                                                | 10                                                                                | 0                                                                                 | 11                                                                                | 5                                                                                 | 12                                                                                  | 889                                                                                 | 16                                                                                  | 1                                                                                   | 1343                                                                                | 363                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 0.99                                                                              | 0.99                                                                              | 0.99                                                                              | 1.07                                                                              | 1.07                                                                              | 1.07                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Split                                                                             | NA                                                                                | Perm                                                                              | Split                                                                             | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | Perm                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 3                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 3                                                                                 | 3                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 36.7                                                                              | 36.7                                                                              | 36.7                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                                | 28.8                                                                                | 28.8                                                                                | 30.8                                                                                | 30.8                                                                                | 30.8                                                                                |

# Lanier Tract DRI

## 10: Dawsonville Highway & Shallowford Rd/Best Buy

existing a.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Total Split (s)         | 36.7                                                                              | 36.7                                                                              | 36.7                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                               | 74.4                                                                                | 74.4                                                                                | 63.6                                                                                | 63.6                                                                                | 63.6                                                                                |
| Total Split (%)         | 24.5%                                                                             | 24.5%                                                                             | 24.5%                                                                             | 25.9%                                                                             | 25.9%                                                                             | 25.9%                                                                             | 7.2%                                                                               | 49.6%                                                                               | 49.6%                                                                               | 42.4%                                                                               | 42.4%                                                                               | 42.4%                                                                               |
| Maximum Green (s)       | 30.0                                                                              | 30.0                                                                              | 30.0                                                                              | 33.0                                                                              | 33.0                                                                              | 33.0                                                                              | 5.0                                                                                | 67.6                                                                                | 67.6                                                                                | 56.8                                                                                | 56.8                                                                                | 56.8                                                                                |
| Yellow Time (s)         | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 4.9                                                                                 | 4.9                                                                                 | 4.9                                                                                 | 4.9                                                                                 | 4.9                                                                                 |
| All-Red Time (s)        | 2.2                                                                               | 2.2                                                                               | 2.2                                                                               | 2.9                                                                               | 2.9                                                                               | 2.9                                                                               | 2.8                                                                                | 1.9                                                                                 | 1.9                                                                                 | 1.9                                                                                 | 1.9                                                                                 | 1.9                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.7                                                                               | 6.7                                                                               | 6.7                                                                               |                                                                                   | 5.9                                                                               | 5.9                                                                               | 5.8                                                                                | 6.8                                                                                 | 6.8                                                                                 | 6.8                                                                                 | 6.8                                                                                 | 6.8                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lag                                                                               | Lead                                                                               |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 | Lag                                                                                 |
| Lead-Lag Optimize?      | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                                |                                                                                     |                                                                                     | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                               | C-Min                                                                               | C-Min                                                                               | C-Min                                                                               | C-Min                                                                               | C-Min                                                                               |
| Walk Time (s)           | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                    | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |
| Flash Dont Walk (s)     | 26.0                                                                              | 26.0                                                                              | 26.0                                                                              | 29.0                                                                              | 29.0                                                                              | 29.0                                                                              |                                                                                    | 18.0                                                                                | 18.0                                                                                | 20.0                                                                                | 20.0                                                                                | 20.0                                                                                |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Act Effect Green (s)    | 12.7                                                                              | 12.7                                                                              | 12.7                                                                              |                                                                                   | 6.5                                                                               | 6.5                                                                               | 119.4                                                                              | 118.4                                                                               | 118.4                                                                               | 113.7                                                                               | 113.7                                                                               | 113.7                                                                               |
| Actuated g/C Ratio      | 0.08                                                                              | 0.08                                                                              | 0.08                                                                              |                                                                                   | 0.04                                                                              | 0.04                                                                              | 0.80                                                                               | 0.79                                                                                | 0.79                                                                                | 0.76                                                                                | 0.76                                                                                | 0.76                                                                                |
| v/c Ratio               | 0.58                                                                              | 0.56                                                                              | 0.04                                                                              |                                                                                   | 0.14                                                                              | 0.03                                                                              | 0.04                                                                               | 0.31                                                                                | 0.01                                                                                | 0.00                                                                                | 0.49                                                                                | 0.28                                                                                |
| Control Delay           | 81.0                                                                              | 79.9                                                                              | 0.4                                                                               |                                                                                   | 72.5                                                                              | 0.3                                                                               | 5.5                                                                                | 5.6                                                                                 | 0.0                                                                                 | 7.0                                                                                 | 6.7                                                                                 | 3.5                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.2                                                                                 | 0.0                                                                                 |
| Total Delay             | 81.0                                                                              | 79.9                                                                              | 0.4                                                                               |                                                                                   | 72.5                                                                              | 0.3                                                                               | 5.5                                                                                | 5.6                                                                                 | 0.0                                                                                 | 7.0                                                                                 | 6.9                                                                                 | 3.5                                                                                 |
| LOS                     | F                                                                                 | E                                                                                 | A                                                                                 |                                                                                   | E                                                                                 | A                                                                                 | A                                                                                  | A                                                                                   | A                                                                                   | A                                                                                   | A                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 75.9                                                                              |                                                                                   |                                                                                   | 49.9                                                                              |                                                                                   |                                                                                    | 5.5                                                                                 |                                                                                     |                                                                                     | 6.2                                                                                 |                                                                                     |
| Approach LOS            |                                                                                   | E                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 45 (30%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 10.6

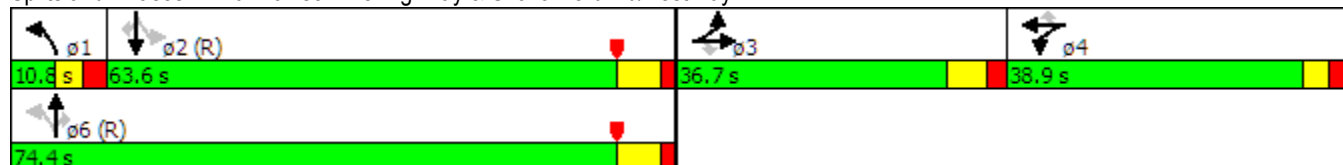
Intersection LOS: B

Intersection Capacity Utilization 59.0%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 10: Dawsonville Highway & Shallowford Rd/Best Buy



Lanier Tract DRI  
1: Sportsman Club Road & Strickland Drive

existing p.m.

Intersection

Int Delay, s/veh 1.6

| Movement                 | WBL  | WBR  | NBT  | NBR  | SBL  | SBT  |
|--------------------------|------|------|------|------|------|------|
| Vol, veh/h               | 7    | 0    | 29   | 9    | 0    | 23   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | 0    | -    | -    | 0    |
| Grade, %                 | 0    | -    | 0    | -    | -    | 0    |
| Peak Hour Factor         | 44   | 44   | 86   | 86   | 82   | 82   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 16   | 0    | 34   | 10   | 0    | 28   |

| Major/Minor          | Minor1 | Major1 | Major2      |
|----------------------|--------|--------|-------------|
| Conflicting Flow All | 67     | 39     | 0 0 44 0    |
| Stage 1              | 39     | -      | - - - -     |
| Stage 2              | 28     | -      | - - - -     |
| Critical Hdwy        | 6.42   | 6.22   | - - 4.12 -  |
| Critical Hdwy Stg 1  | 5.42   | -      | - - - -     |
| Critical Hdwy Stg 2  | 5.42   | -      | - - - -     |
| Follow-up Hdwy       | 3.518  | 3.318  | - - 2.218 - |
| Pot Cap-1 Maneuver   | 938    | 1033   | - - 1564 -  |
| Stage 1              | 983    | -      | - - - -     |
| Stage 2              | 995    | -      | - - - -     |
| Platoon blocked, %   |        |        | - - - -     |
| Mov Cap-1 Maneuver   | 938    | 1033   | - - 1564 -  |
| Mov Cap-2 Maneuver   | 938    | -      | - - - -     |
| Stage 1              | 983    | -      | - - - -     |
| Stage 2              | 995    | -      | - - - -     |

| Approach             | WB  | NB | SB |
|----------------------|-----|----|----|
| HCM Control Delay, s | 8.9 | 0  | 0  |
| HCM LOS              | A   |    |    |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL  | SBT |
|-----------------------|-----|----------|------|-----|
| Capacity (veh/h)      | -   | - 938    | 1564 | -   |
| HCM Lane V/C Ratio    | -   | - 0.017  | -    | -   |
| HCM Control Delay (s) | -   | - 8.9    | 0    | -   |
| HCM Lane LOS          | -   | - A      | A    | -   |
| HCM 95th %tile Q(veh) | -   | - 0.1    | 0    | -   |



Lanier Tract DRI  
2: GA 53 & Sportsman Club Road

existing p.m.

| Intersection     |      |  |  |  |  |  |  |  |  |  |  |  |
|------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Int Delay, s/veh | 17.3 |  |  |  |  |  |  |  |  |  |  |  |

| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol, veh/h               | 15   | 1039 | 0    | 2    | 1671 | 19   | 0    | 0    | 0    | 28   | 0    | 9    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 95   | 95   | 95   | 96   | 96   | 96   | 92   | 92   | 92   | 66   | 66   | 66   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 16   | 1094 | 0    | 2    | 1741 | 20   | 0    | 0    | 0    | 42   | 0    | 14   |

| Major/Minor          | Major1 |   |   | Major2 |   |   | Minor1 |      |      | Minor2 |      |      |
|----------------------|--------|---|---|--------|---|---|--------|------|------|--------|------|------|
| Conflicting Flow All | 1760   | 0 | 0 | 1094   | 0 | 0 | 1999   | 2890 | 547  | 2333   | 2880 | 880  |
| Stage 1              | -      | - | - | -      | - | - | 1125   | 1125 | -    | 1755   | 1755 | -    |
| Stage 2              | -      | - | - | -      | - | - | 874    | 1765 | -    | 578    | 1125 | -    |
| Critical Hdwy        | 4.14   | - | - | 4.14   | - | - | 7.54   | 6.54 | 6.94 | 7.54   | 6.54 | 6.94 |
| Critical Hdwy Stg 1  | -      | - | - | -      | - | - | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    |
| Critical Hdwy Stg 2  | -      | - | - | -      | - | - | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    |
| Follow-up Hdwy       | 2.22   | - | - | 2.22   | - | - | 3.52   | 4.02 | 3.32 | 3.52   | 4.02 | 3.32 |
| Pot Cap-1 Maneuver   | 351    | - | - | 634    | - | - | 35     | 16   | 481  | ~ 20   | 16   | 290  |
| Stage 1              | -      | - | - | -      | - | - | 218    | 278  | -    | 88     | 137  | -    |
| Stage 2              | -      | - | - | -      | - | - | 311    | 136  | -    | 468    | 278  | -    |
| Platoon blocked, %   | -      | - | - | -      | - | - | -      | -    | -    | -      | -    | -    |
| Mov Cap-1 Maneuver   | 351    | - | - | 634    | - | - | 32     | 15   | 481  | ~ 19   | 15   | 290  |
| Mov Cap-2 Maneuver   | -      | - | - | -      | - | - | 32     | 15   | -    | ~ 19   | 15   | -    |
| Stage 1              | -      | - | - | -      | - | - | 208    | 265  | -    | 84     | 137  | -    |
| Stage 2              | -      | - | - | -      | - | - | 295    | 136  | -    | 447    | 265  | -    |

| Approach             | EB  | WB | NB | SB       |
|----------------------|-----|----|----|----------|
| HCM Control Delay, s | 0.2 | 0  | 0  | \$ 901.3 |
| HCM LOS              |     |    | A  | F        |

| Minor Lane/Major Mvmt | NBLn1 | EBL   | EBT | EBR | WBL   | WBT | WBR | SBLn1    |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|----------|
| Capacity (veh/h)      | -     | 351   | -   | -   | 634   | -   | -   | 25       |
| HCM Lane V/C Ratio    | -     | 0.045 | -   | -   | 0.003 | -   | -   | 2.242    |
| HCM Control Delay (s) | 0     | 15.7  | -   | -   | 10.7  | -   | -   | \$ 901.3 |
| HCM Lane LOS          | A     | C     | -   | -   | B     | -   | -   | F        |
| HCM 95th %tile Q(veh) | -     | 0.1   | -   | -   | 0     | -   | -   | 6.9      |

| Notes                                                                                                                |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |  |  |  |  |  |  |  |  |  |  |  |  |

| Intersection             |        |        |       |        |      |      |
|--------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh         | 1.2    |        |       |        |      |      |
| Movement                 | EBL    | EBR    | NBL   | NBT    | SBT  | SBR  |
| Vol, veh/h               | 11     | 47     | 62    | 1650   | 1104 | 14   |
| Conflicting Peds, #/hr   | 0      | 0      | 0     | 0      | 0    | 0    |
| Sign Control             | Stop   | Stop   | Free  | Free   | Free | Free |
| RT Channelized           | -      | None   | -     | None   | -    | None |
| Storage Length           | 0      | 0      | 0     | -      | -    | 0    |
| Veh in Median Storage, # | 0      | -      | -     | 0      | 0    | -    |
| Grade, %                 | 0      | -      | -     | 0      | 0    | -    |
| Peak Hour Factor         | 76     | 76     | 95    | 95     | 100  | 100  |
| Heavy Vehicles, %        | 2      | 2      | 2     | 2      | 2    | 2    |
| Mvmt Flow                | 14     | 62     | 65    | 1737   | 1104 | 14   |
| Major/Minor              | Minor2 | Major1 |       | Major2 |      |      |
| Conflicting Flow All     | 2103   | 552    | 1104  | 0      | -    | 0    |
| Stage 1                  | 1104   | -      | -     | -      | -    | -    |
| Stage 2                  | 999    | -      | -     | -      | -    | -    |
| Critical Hdwy            | 6.84   | 6.94   | 4.14  | -      | -    | -    |
| Critical Hdwy Stg 1      | 5.84   | -      | -     | -      | -    | -    |
| Critical Hdwy Stg 2      | 5.84   | -      | -     | -      | -    | -    |
| Follow-up Hdwy           | 3.52   | 3.32   | 2.22  | -      | -    | -    |
| Pot Cap-1 Maneuver       | 44     | 477    | 628   | -      | -    | -    |
| Stage 1                  | 279    | -      | -     | -      | -    | -    |
| Stage 2                  | 317    | -      | -     | -      | -    | -    |
| Platoon blocked, %       |        |        |       | -      | -    | -    |
| Mov Cap-1 Maneuver       | 39     | 477    | 628   | -      | -    | -    |
| Mov Cap-2 Maneuver       | 39     | -      | -     | -      | -    | -    |
| Stage 1                  | 279    | -      | -     | -      | -    | -    |
| Stage 2                  | 284    | -      | -     | -      | -    | -    |
| Approach                 | EB     | NB     |       | SB     |      |      |
| HCM Control Delay, s     | 38.4   | 0.4    |       | 0      |      |      |
| HCM LOS                  | E      |        |       |        |      |      |
| Minor Lane/Major Mvmt    | NBL    | NBT    | EBLn1 | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)         | 628    | -      | 39    | 477    | -    | -    |
| HCM Lane V/C Ratio       | 0.104  | -      | 0.371 | 0.13   | -    | -    |
| HCM Control Delay (s)    | 11.4   | -      | 144.1 | 13.7   | -    | -    |
| HCM Lane LOS             | B      | -      | F     | B      | -    | -    |
| HCM 95th %tile Q(veh)    | 0.3    | -      | 1.3   | 0.4    | -    | -    |

Lanier Tract DRI  
4: Canterbury Road & GA 53

existing p.m.

| Intersection             |        |        |       |        |      |      |
|--------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh         | 1.2    |        |       |        |      |      |
|                          |        |        |       |        |      |      |
|                          |        |        |       |        |      |      |
| Movement                 | EBL    | EBR    | NBL   | NBT    | SBT  | SBR  |
| Vol, veh/h               | 7      | 28     | 111   | 1682   | 1105 | 14   |
| Conflicting Peds, #/hr   | 0      | 0      | 0     | 0      | 0    | 0    |
| Sign Control             | Stop   | Stop   | Free  | Free   | Free | Free |
| RT Channelized           | -      | None   | -     | None   | -    | None |
| Storage Length           | 0      | 0      | 0     | -      | -    | 0    |
| Veh in Median Storage, # | 0      | -      | -     | 0      | 0    | -    |
| Grade, %                 | 0      | -      | -     | 0      | 0    | -    |
| Peak Hour Factor         | 80     | 80     | 96    | 96     | 96   | 96   |
| Heavy Vehicles, %        | 2      | 2      | 2     | 2      | 2    | 2    |
| Mvmt Flow                | 9      | 35     | 116   | 1752   | 1151 | 15   |
|                          |        |        |       |        |      |      |
| Major/Minor              | Minor2 | Major1 |       | Major2 |      |      |
| Conflicting Flow All     | 2258   | 576    | 1151  | 0      | -    | 0    |
| Stage 1                  | 1151   | -      | -     | -      | -    | -    |
| Stage 2                  | 1107   | -      | -     | -      | -    | -    |
| Critical Hdwy            | 6.84   | 6.94   | 4.14  | -      | -    | -    |
| Critical Hdwy Stg 1      | 5.84   | -      | -     | -      | -    | -    |
| Critical Hdwy Stg 2      | 5.84   | -      | -     | -      | -    | -    |
| Follow-up Hdwy           | 3.52   | 3.32   | 2.22  | -      | -    | -    |
| Pot Cap-1 Maneuver       | 35     | 460    | 603   | -      | -    | -    |
| Stage 1                  | 263    | -      | -     | -      | -    | -    |
| Stage 2                  | 278    | -      | -     | -      | -    | -    |
| Platoon blocked, %       |        |        |       | -      | -    | -    |
| Mov Cap-1 Maneuver       | 28     | 460    | 603   | -      | -    | -    |
| Mov Cap-2 Maneuver       | 28     | -      | -     | -      | -    | -    |
| Stage 1                  | 263    | -      | -     | -      | -    | -    |
| Stage 2                  | 225    | -      | -     | -      | -    | -    |
|                          |        |        |       |        |      |      |
| Approach                 | EB     | NB     |       | SB     |      |      |
| HCM Control Delay, s     | 47.6   | 0.8    |       | 0      |      |      |
| HCM LOS                  | E      |        |       |        |      |      |
|                          |        |        |       |        |      |      |
| Minor Lane/Major Mvmt    | NBL    | NBT    | EBLn1 | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)         | 603    | -      | 28    | 460    | -    | -    |
| HCM Lane V/C Ratio       | 0.192  | -      | 0.313 | 0.076  | -    | -    |
| HCM Control Delay (s)    | 12.4   | -      | 183.8 | 13.5   | -    | -    |
| HCM Lane LOS             | B      | -      | F     | B      | -    | -    |
| HCM 95th %tile Q(veh)    | 0.7    | -      | 1     | 0.2    | -    | -    |

Lanier Tract DRI  
7: GA 53 & Beechwood Boulevard

existing p.m.

| Intersection             |        |        |       |        |      |      |
|--------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh         | 0.7    |        |       |        |      |      |
| Movement                 | EBL    | EBR    | NBL   | NBT    | SBT  | SBR  |
| Vol, veh/h               | 1      | 47     | 86    | 1998   | 1388 | 9    |
| Conflicting Peds, #/hr   | 0      | 0      | 0     | 0      | 0    | 0    |
| Sign Control             | Stop   | Stop   | Free  | Free   | Free | Free |
| RT Channelized           | -      | Yield  | -     | Yield  | -    | None |
| Storage Length           | 0      | 0      | 200   | -      | -    | 360  |
| Veh in Median Storage, # | 0      | -      | -     | 0      | 0    | -    |
| Grade, %                 | 0      | -      | -     | 1      | 0    | -    |
| Peak Hour Factor         | 71     | 71     | 99    | 99     | 98   | 98   |
| Heavy Vehicles, %        | 0      | 0      | 0     | 0      | 1    | 0    |
| Mvmt Flow                | 1      | 66     | 87    | 2018   | 1416 | 9    |
| Major/Minor              | Minor2 | Major1 |       | Major2 |      |      |
| Conflicting Flow All     | 2599   | 709    | 1416  | 0      | -    | 0    |
| Stage 1                  | 1416   | -      | -     | -      | -    | -    |
| Stage 2                  | 1183   | -      | -     | -      | -    | -    |
| Critical Hdwy            | 6.8    | 6.9    | 4.1   | -      | -    | -    |
| Critical Hdwy Stg 1      | 5.8    | -      | -     | -      | -    | -    |
| Critical Hdwy Stg 2      | 5.8    | -      | -     | -      | -    | -    |
| Follow-up Hdwy           | 3.5    | 3.3    | 2.2   | -      | -    | -    |
| Pot Cap-1 Maneuver       | 21     | 381    | 487   | -      | -    | -    |
| Stage 1                  | 193    | -      | -     | -      | -    | -    |
| Stage 2                  | 257    | -      | -     | -      | -    | -    |
| Platoon blocked, %       |        |        |       | -      | -    | -    |
| Mov Cap-1 Maneuver       | 17     | 381    | 487   | -      | -    | -    |
| Mov Cap-2 Maneuver       | 17     | -      | -     | -      | -    | -    |
| Stage 1                  | 193    | -      | -     | -      | -    | -    |
| Stage 2                  | 211    | -      | -     | -      | -    | -    |
| Approach                 | EB     | NB     |       | SB     |      |      |
| HCM Control Delay, s     | 21     | 0.6    |       | 0      |      |      |
| HCM LOS                  | C      |        |       |        |      |      |
| Minor Lane/Major Mvmt    | NBL    | NBT    | EBLn1 | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)         | 487    | -      | 17    | 381    | -    | -    |
| HCM Lane V/C Ratio       | 0.178  | -      | 0.083 | 0.174  | -    | -    |
| HCM Control Delay (s)    | 14     | -      | 235.1 | 16.4   | -    | -    |
| HCM Lane LOS             | B      | -      | F     | C      | -    | -    |
| HCM 95th %tile Q(veh)    | 0.6    | -      | 0.2   | 0.6    | -    | -    |

# Lanier Tract DRI

## 5: GA 53 & Lanier Valley Dr/Ahaluna Dr

existing p.m.

| Lane Group            | EBL   | EBT   | EBR | WBL   | WBT   | WBR | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
|-----------------------|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Total Split (s)       | 33.0  | 33.0  |     | 33.0  | 33.0  |     | 28.0  | 127.0 |     | 99.0  | 99.0  |     |
| Total Split (%)       | 20.6% | 20.6% |     | 20.6% | 20.6% |     | 17.5% | 79.4% |     | 61.9% | 61.9% |     |
| Maximum Green (s)     | 26.4  | 26.4  |     | 26.4  | 26.4  |     | 22.4  | 120.9 |     | 92.9  | 92.9  |     |
| Yellow Time (s)       | 4.0   | 4.0   |     | 4.0   | 4.0   |     | 3.0   | 4.5   |     | 4.5   | 4.5   |     |
| All-Red Time (s)      | 2.6   | 2.6   |     | 2.6   | 2.6   |     | 2.6   | 1.6   |     | 1.6   | 1.6   |     |
| Lost Time Adjust (s)  |       | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Lost Time (s)   |       | 6.6   |     |       | 6.6   |     | 5.6   | 6.1   |     | 6.1   | 6.1   |     |
| Lead/Lag              |       |       |     |       |       |     | Lead  |       |     | Lag   | Lag   |     |
| Lead-Lag Optimize?    |       |       |     |       |       |     | Yes   |       |     | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode           | None  | None  |     | None  | None  |     | None  | C-Max |     | C-Max | C-Max |     |
| Act Effect Green (s)  |       | 15.5  |     |       | 15.5  |     | 132.3 | 131.8 |     | 117.1 | 117.1 |     |
| Actuated g/C Ratio    |       | 0.10  |     |       | 0.10  |     | 0.83  | 0.82  |     | 0.73  | 0.73  |     |
| v/c Ratio             |       | 0.56  |     |       | 0.85  |     | 0.52  | 0.63  |     | 0.15  | 0.48  |     |
| Control Delay         |       | 26.1  |     |       | 97.4  |     | 9.9   | 8.5   |     | 11.5  | 10.4  |     |
| Queue Delay           |       | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay           |       | 26.1  |     |       | 97.4  |     | 9.9   | 8.5   |     | 11.5  | 10.4  |     |
| LOS                   |       | C     |     |       | F     |     | A     | A     |     | B     | B     |     |
| Approach Delay        |       | 26.1  |     |       | 97.4  |     |       | 8.6   |     |       | 10.4  |     |
| Approach LOS          |       | C     |     |       | F     |     |       | A     |     |       | B     |     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 129 (81%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 12.7

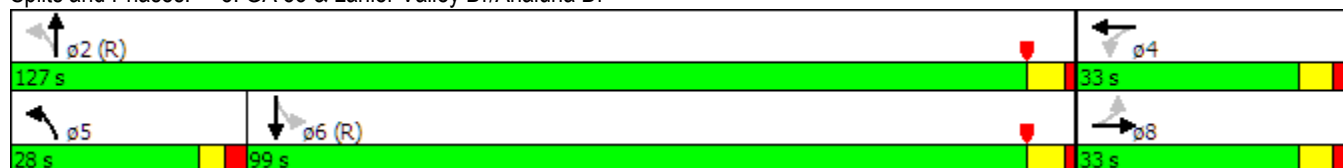
Intersection LOS: B

Intersection Capacity Utilization 79.8%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 5: GA 53 & Lanier Valley Dr/Ahaluna Dr



## Lanier Tract DRI

## 6: 53-Dawsonville Hwy &amp; Academy Sports

existing p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |  |    |  |  |  |  |  |
| Volume (vph)               | 13                                                                                | 3                                                                                 | 60                                                                                | 118                                                                               | 7                                                                                 | 42                                                                                | 87                                                                                  | 1763                                                                                | 138                                                                                 | 19                                                                                  | 1199                                                                                | 27                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 4%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 70                                                                                | 200                                                                                 |                                                                                     | 170                                                                                 | 190                                                                                 |                                                                                     | 360                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1805                                                                              | 1900                                                                              | 1615                                                                              | 1769                                                                              | 1862                                                                              | 1583                                                                              | 1796                                                                                | 3592                                                                                | 1607                                                                                | 1805                                                                                | 3574                                                                                | 1615                                                                                |
| Flt Permitted              | 0.752                                                                             |                                                                                   |                                                                                   | 0.756                                                                             |                                                                                   |                                                                                   | 0.177                                                                               |                                                                                     |                                                                                     | 0.083                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1429                                                                              | 1900                                                                              | 1615                                                                              | 1408                                                                              | 1862                                                                              | 1583                                                                              | 335                                                                                 | 3592                                                                                | 1607                                                                                | 158                                                                                 | 3574                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 63                                                                                |                                                                                   |                                                                                   | 63                                                                                |                                                                                     |                                                                                     | 69                                                                                  |                                                                                     |                                                                                     | 64                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 262                                                                               |                                                                                   |                                                                                   | 246                                                                               |                                                                                   |                                                                                     | 1836                                                                                |                                                                                     |                                                                                     | 685                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.1                                                                               |                                                                                   |                                                                                   | 6.7                                                                               |                                                                                   |                                                                                     | 27.8                                                                                |                                                                                     |                                                                                     | 10.4                                                                                |                                                                                     |
| Peak Hour Factor           | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.80                                                                              | 0.80                                                                              | 0.80                                                                              | 0.98                                                                                | 0.98                                                                                | 0.98                                                                                | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 14                                                                                | 3                                                                                 | 63                                                                                | 148                                                                               | 9                                                                                 | 52                                                                                | 89                                                                                  | 1799                                                                                | 141                                                                                 | 20                                                                                  | 1236                                                                                | 28                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 14                                                                                | 3                                                                                 | 63                                                                                | 148                                                                               | 9                                                                                 | 52                                                                                | 89                                                                                  | 1799                                                                                | 141                                                                                 | 20                                                                                  | 1236                                                                                | 28                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 2                                                                                   |                                                                                     | 2                                                                                   | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 42.0                                                                              | 42.0                                                                              | 42.0                                                                              | 42.4                                                                              | 42.4                                                                              | 42.4                                                                              | 11.4                                                                                | 30.3                                                                                | 30.3                                                                                | 11.0                                                                                | 29.3                                                                                | 29.3                                                                                |

# Lanier Tract DRI

## 6: 53-Dawsonville Hwy & Academy Sports

existing p.m.

|                         |  |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 43.0                                                                               | 43.0  | 43.0  | 43.0  | 43.0  | 43.0  | 13.6  | 106.0 | 106.0 | 11.0  | 103.4 | 103.4 |
| Total Split (%)         | 26.9%                                                                              | 26.9% | 26.9% | 26.9% | 26.9% | 26.9% | 8.5%  | 66.3% | 66.3% | 6.9%  | 64.6% | 64.6% |
| Maximum Green (s)       | 36.6                                                                               | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  | 7.2   | 99.8  | 99.8  | 5.0   | 97.2  | 97.2  |
| Yellow Time (s)         | 3.4                                                                                | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 4.3   | 4.3   | 3.0   | 4.3   | 4.3   |
| All-Red Time (s)        | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 1.9   | 1.9   | 3.0   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.4                                                                                | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.2   | 6.2   | 6.0   | 6.2   | 6.2   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           | 4.0                                                                                | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 23.0                                                                               | 23.0  | 23.0  | 32.0  | 32.0  | 32.0  |       | 20.0  | 20.0  |       | 19.0  | 19.0  |
| Pedestrian Calls (#/hr) | 0                                                                                  | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    | 22.1                                                                               | 22.1  | 22.1  | 22.1  | 22.1  | 22.1  | 122.7 | 118.0 | 118.0 | 117.5 | 111.4 | 111.4 |
| Actuated g/C Ratio      | 0.14                                                                               | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.77  | 0.74  | 0.74  | 0.73  | 0.70  | 0.70  |
| v/c Ratio               | 0.07                                                                               | 0.01  | 0.23  | 0.76  | 0.04  | 0.19  | 0.27  | 0.68  | 0.12  | 0.11  | 0.50  | 0.02  |
| Control Delay           | 57.2                                                                               | 55.0  | 13.8  | 89.5  | 56.0  | 9.9   | 7.8   | 13.6  | 6.8   | 5.5   | 8.9   | 0.0   |
| Queue Delay             | 0.0                                                                                | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.1   | 0.0   |
| Total Delay             | 57.2                                                                               | 55.0  | 13.8  | 89.5  | 56.0  | 9.9   | 7.8   | 13.6  | 6.8   | 5.5   | 9.0   | 0.0   |
| LOS                     | E                                                                                  | D     | B     | F     | E     | A     | A     | B     | A     | A     | A     | A     |
| Approach Delay          |                                                                                    | 22.9  |       |       | 68.3  |       |       | 12.9  |       |       | 8.7   |       |
| Approach LOS            |                                                                                    | C     |       |       | E     |       |       | B     |       |       | A     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 120 (75%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 115

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.76

Intersection Signal Delay: 14.8

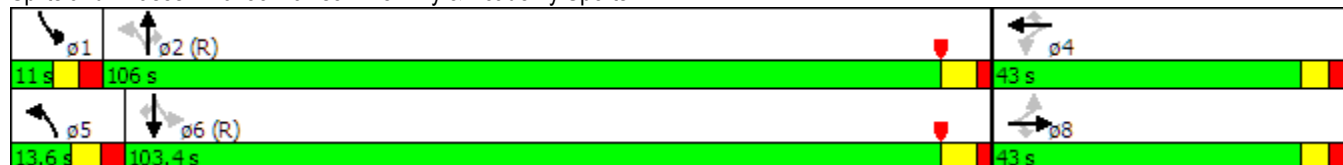
Intersection LOS: B

Intersection Capacity Utilization 81.6%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 6: 53-Dawsonville Hwy & Academy Sports



## Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 &amp; McEver Road/McEver

existing p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |                                                                                   |  |  |  |  |  |  |
| Volume (vph)               | 845                                                                               | 213                                                                               | 386                                                                               | 87                                                                                | 91                                                                                | 81                                                                                | 433                                                                                | 1362                                                                                | 46                                                                                  | 62                                                                                  | 1029                                                                                | 481                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                               | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 1%                                                                                |                                                                                   |                                                                                   | 5%                                                                                |                                                                                   |                                                                                    | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 180                                                                               |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 310                                                                                |                                                                                     | 185                                                                                 | 255                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 2                                                                                  |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 50                                                                                |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                 |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.97                                                                               | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.951                                                                             | 0.850                                                                             |                                                                                   | 0.929                                                                             |                                                                                   |                                                                                    |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 3484                                                                              | 1708                                                                              | 1527                                                                              | 1760                                                                              | 1721                                                                              | 0                                                                                 | 3484                                                                               | 3592                                                                                | 1607                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   | 0.550                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 3484                                                                              | 1708                                                                              | 1527                                                                              | 1019                                                                              | 1721                                                                              | 0                                                                                 | 3484                                                                               | 3592                                                                                | 1607                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 19                                                                                | 296                                                                               |                                                                                   | 27                                                                                |                                                                                   |                                                                                    |                                                                                     | 172                                                                                 |                                                                                     |                                                                                     | 307                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                    | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 580                                                                               |                                                                                   |                                                                                   | 331                                                                               |                                                                                   |                                                                                    | 921                                                                                 |                                                                                     |                                                                                     | 1504                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 8.8                                                                               |                                                                                   |                                                                                   | 9.0                                                                               |                                                                                   |                                                                                    | 14.0                                                                                |                                                                                     |                                                                                     | 22.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.86                                                                              | 0.86                                                                              | 0.86                                                                              | 0.97                                                                               | 0.97                                                                                | 0.97                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                 | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 889                                                                               | 224                                                                               | 406                                                                               | 101                                                                               | 106                                                                               | 94                                                                                | 446                                                                                | 1404                                                                                | 47                                                                                  | 68                                                                                  | 1131                                                                                | 529                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   | 27%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 889                                                                               | 334                                                                               | 296                                                                               | 101                                                                               | 200                                                                               | 0                                                                                 | 446                                                                                | 1404                                                                                | 47                                                                                  | 68                                                                                  | 1131                                                                                | 529                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                               | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 24                                                                                |                                                                                   |                                                                                   | 24                                                                                |                                                                                   |                                                                                    | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                    | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                 |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                  | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                 | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                 | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                             | NA                                                                                |                                                                                   | Prot                                                                               | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 8                                                                                 |                                                                                   | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                  | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 8                                                                                 | 8                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                  | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 13.2                                                                              | 50.2                                                                              | 50.2                                                                              | 11.6                                                                              | 48.2                                                                              |                                                                                   | 13.4                                                                               | 35.6                                                                                | 35.6                                                                                | 12.9                                                                                | 44.6                                                                                | 44.6                                                                                |



# Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 & McEver Road/McEver

existing p.m.

| Lane Group              | EBL   | EBT   | EBR   | WBL  | WBT   | WBR | NBL   | NBT   | NBR   | SBL  | SBT   | SBR   |
|-------------------------|-------|-------|-------|------|-------|-----|-------|-------|-------|------|-------|-------|
| Total Split (s)         | 37.0  | 72.1  | 72.1  | 13.1 | 48.2  |     | 23.0  | 61.8  | 61.8  | 13.0 | 51.8  | 51.8  |
| Total Split (%)         | 23.1% | 45.1% | 45.1% | 8.2% | 30.1% |     | 14.4% | 38.6% | 38.6% | 8.1% | 32.4% | 32.4% |
| Maximum Green (s)       | 29.7  | 64.8  | 64.8  | 6.6  | 40.9  |     | 15.5  | 55.2  | 55.2  | 5.8  | 45.2  | 45.2  |
| Yellow Time (s)         | 4.3   | 4.3   | 4.3   | 3.5  | 4.3   |     | 4.5   | 4.4   | 4.4   | 4.2  | 4.4   | 4.4   |
| All-Red Time (s)        | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 2.2   | 2.2   | 3.0  | 2.2   | 2.2   |
| Lost Time Adjust (s)    | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Lost Time (s)     | 7.3   | 7.3   | 7.3   | 6.5  | 7.3   |     | 7.5   | 6.6   | 6.6   | 7.2  | 6.6   | 6.6   |
| Lead/Lag                | Lead  | Lag   | Lag   | Lead | Lag   |     | Lag   | Lag   | Lag   | Lead | Lead  | Lead  |
| Lead-Lag Optimize?      | Yes   | Yes   | Yes   | Yes  | Yes   |     | Yes   | Yes   | Yes   | Yes  | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   |
| Recall Mode             | None  | None  | None  | None | None  |     | None  | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s)           |       | 4.0   | 4.0   |      | 4.0   |     |       | 4.0   | 4.0   |      | 4.0   | 4.0   |
| Flash Dont Walk (s)     |       | 38.0  | 38.0  |      | 36.0  |     |       | 25.0  | 25.0  |      | 34.0  | 34.0  |
| Pedestrian Calls (#/hr) |       | 0     | 0     |      | 0     |     |       | 0     | 0     |      | 0     | 0     |
| Act Effect Green (s)    | 29.7  | 45.6  | 45.6  | 29.1 | 21.7  |     | 15.5  | 66.4  | 66.4  | 13.8 | 64.4  | 64.4  |
| Actuated g/C Ratio      | 0.19  | 0.28  | 0.28  | 0.18 | 0.14  |     | 0.10  | 0.42  | 0.42  | 0.09 | 0.40  | 0.40  |
| v/c Ratio               | 1.38  | 0.67  | 0.46  | 0.47 | 0.78  |     | 1.32  | 0.94  | 0.06  | 0.44 | 0.78  | 0.63  |
| Control Delay           | 225.2 | 53.9  | 6.2   | 45.5 | 77.5  |     | 221.7 | 71.5  | 0.1   | 73.5 | 62.2  | 34.7  |
| Queue Delay             | 0.0   | 0.4   | 0.1   | 1.2  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Delay             | 225.2 | 54.3  | 6.4   | 46.7 | 77.5  |     | 221.7 | 71.5  | 0.1   | 73.5 | 62.2  | 34.7  |
| LOS                     | F     | D     | A     | D    | E     |     | F     | E     | A     | E    | E     | C     |
| Approach Delay          |       | 145.0 |       |      | 67.2  |     |       | 105.0 |       |      | 54.2  |       |
| Approach LOS            |       | F     |       |      | E     |     |       | F     |       |      | D     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 52 (33%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.38

Intersection Signal Delay: 98.0

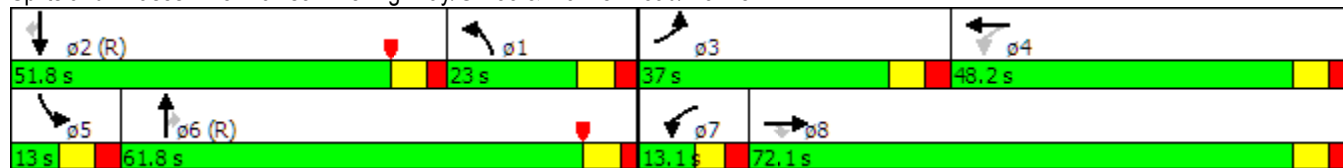
Intersection LOS: F

Intersection Capacity Utilization 99.3%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 8: Dawsonville Highway/GA 53 & McEver Road/McEver



Lanier Tract DRI

9: Dawsonville Highway & Greenhill Circle/Greenhill Circle

existing p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 132                                                                               | 9                                                                                 | 138                                                                               | 60                                                                                | 20                                                                                | 38                                                                                | 248                                                                                 | 1749                                                                                | 70                                                                                  | 40                                                                                  | 1392                                                                                | 53                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 3%                                                                                |                                                                                   |                                                                                   | 7%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 190                                                                                 |                                                                                     | 190                                                                                 | 185                                                                                 |                                                                                     | 100                                                                                 |
| Storage Lanes              | 0                                                                                 |                                                                                   | 1                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              |                                                                                   | 0.955                                                                             |                                                                                   |                                                                                   | 0.964                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1787                                                                              | 1591                                                                              | 0                                                                                 | 1767                                                                              | 1558                                                                              | 1796                                                                                | 3592                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   | 0.608                                                                             |                                                                                   |                                                                                   | 0.504                                                                             |                                                                                   | 0.091                                                                               |                                                                                     |                                                                                     | 0.088                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1138                                                                              | 1591                                                                              | 0                                                                                 | 924                                                                               | 1558                                                                              | 172                                                                                 | 3592                                                                                | 1607                                                                                | 167                                                                                 | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 152                                                                               |                                                                                   |                                                                                   | 95                                                                                |                                                                                     |                                                                                     | 54                                                                                  |                                                                                     |                                                                                     | 95                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 288                                                                               |                                                                                   |                                                                                   | 254                                                                               |                                                                                   |                                                                                     | 778                                                                                 |                                                                                     |                                                                                     | 921                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.9                                                                               |                                                                                   |                                                                                   | 6.9                                                                               |                                                                                   |                                                                                     | 11.8                                                                                |                                                                                     |                                                                                     | 14.0                                                                                |                                                                                     |
| Peak Hour Factor           | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.78                                                                              | 0.78                                                                              | 0.78                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 145                                                                               | 10                                                                                | 152                                                                               | 77                                                                                | 26                                                                                | 49                                                                                | 256                                                                                 | 1803                                                                                | 72                                                                                  | 42                                                                                  | 1465                                                                                | 56                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 155                                                                               | 152                                                                               | 0                                                                                 | 103                                                                               | 49                                                                                | 256                                                                                 | 1803                                                                                | 72                                                                                  | 42                                                                                  | 1465                                                                                | 56                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.02                                                                              | 1.02                                                                              | 1.02                                                                              | 1.05                                                                              | 1.05                                                                              | 1.05                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              | 23.0                                                                              | 39.9                                                                              | 39.9                                                                              | 39.9                                                                              | 11.0                                                                                | 28.0                                                                                | 28.0                                                                                | 10.0                                                                                | 36.0                                                                                | 36.0                                                                                |

# Lanier Tract DRI

## 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle

existing p.m.

|                         |  |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 40.0                                                                               | 40.0  | 40.0  | 40.0  | 40.0  | 40.0  | 35.0  | 109.0 | 109.0 | 11.0  | 85.0  | 85.0  |
| Total Split (%)         | 25.0%                                                                              | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 21.9% | 68.1% | 68.1% | 6.9%  | 53.1% | 53.1% |
| Maximum Green (s)       | 34.1                                                                               | 34.1  | 34.1  | 34.1  | 34.1  | 34.1  | 29.0  | 103.0 | 103.0 | 6.0   | 79.0  | 79.0  |
| Yellow Time (s)         | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 4.4   | 4.4   | 3.5   | 4.4   | 4.4   |
| All-Red Time (s)        | 2.9                                                                                | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 3.0   | 1.6   | 1.6   | 1.5   | 1.6   | 1.6   |
| Lost Time Adjust (s)    |                                                                                    | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |                                                                                    | 5.9   | 5.9   |       | 5.9   | 5.9   | 6.0   | 6.0   | 6.0   | 5.0   | 6.0   | 6.0   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           |                                                                                    |       |       | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    |       |       | 30.0  | 30.0  | 30.0  |       | 18.0  | 18.0  |       | 26.0  | 26.0  |
| Pedestrian Calls (#/hr) |                                                                                    |       |       | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    |                                                                                    | 25.7  | 25.7  |       | 25.7  | 25.7  | 122.4 | 113.4 | 113.4 | 101.3 | 94.2  | 94.2  |
| Actuated g/C Ratio      |                                                                                    | 0.16  | 0.16  |       | 0.16  | 0.16  | 0.76  | 0.71  | 0.71  | 0.63  | 0.59  | 0.59  |
| v/c Ratio               |                                                                                    | 0.85  | 0.40  |       | 0.70  | 0.15  | 0.72  | 0.71  | 0.06  | 0.25  | 0.69  | 0.06  |
| Control Delay           |                                                                                    | 100.8 | 10.4  |       | 86.0  | 0.9   | 25.8  | 25.6  | 6.1   | 16.4  | 50.1  | 11.5  |
| Queue Delay             |                                                                                    | 0.0   | 0.4   |       | 3.9   | 0.0   | 0.0   | 7.9   | 0.0   | 0.0   | 0.4   | 0.0   |
| Total Delay             |                                                                                    | 100.8 | 10.8  |       | 90.0  | 0.9   | 25.8  | 33.5  | 6.1   | 16.4  | 50.4  | 11.5  |
| LOS                     |                                                                                    | F     | B     |       | F     | A     | C     | C     | A     | B     | D     | B     |
| Approach Delay          |                                                                                    | 56.2  |       |       | 61.3  |       |       | 31.6  |       |       | 48.1  |       |
| Approach LOS            |                                                                                    | E     |       |       | E     |       |       | C     |       |       | D     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 40.7

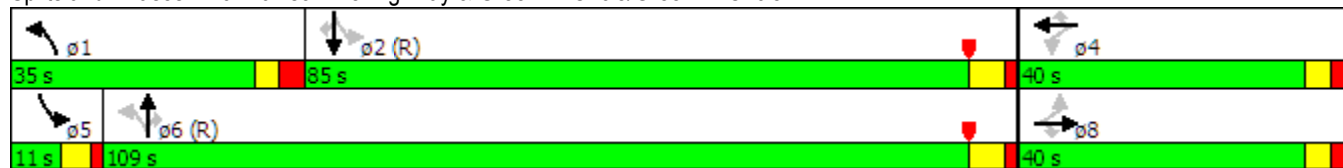
Intersection LOS: D

Intersection Capacity Utilization 81.6%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle



## Lanier Tract DRI

## 10: Dawsonville Highway &amp; Shallowford Rd/Best Buy

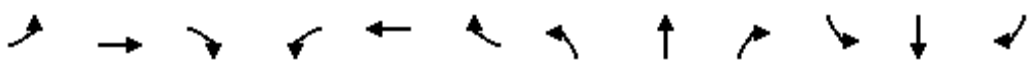
existing p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 518                                                                               | 38                                                                                | 26                                                                                | 36                                                                                | 27                                                                                | 7                                                                                 | 40                                                                                  | 1639                                                                                | 114                                                                                 | 7                                                                                   | 1161                                                                                | 463                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | -1%                                                                               |                                                                                   |                                                                                   | 10%                                                                               |                                                                                   |                                                                                     | -4%                                                                                 |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 350                                                                               |                                                                                   | 350                                                                               | 0                                                                                 |                                                                                   | 0                                                                                 | 350                                                                                 |                                                                                     | 150                                                                                 | 265                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 100                                                                               |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             | 0.959                                                                             |                                                                                   |                                                                                   | 0.972                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1723                                                                              | 1740                                                                              | 1623                                                                              | 0                                                                                 | 1754                                                                              | 1534                                                                              | 1841                                                                                | 3682                                                                                | 1647                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             | 0.959                                                                             |                                                                                   |                                                                                   | 0.972                                                                             |                                                                                   | 0.113                                                                               |                                                                                     |                                                                                     | 0.060                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1723                                                                              | 1740                                                                              | 1623                                                                              | 0                                                                                 | 1754                                                                              | 1534                                                                              | 219                                                                                 | 3682                                                                                | 1647                                                                                | 115                                                                                 | 3628                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 106                                                                               |                                                                                   |                                                                                   | 111                                                                               |                                                                                     |                                                                                     | 65                                                                                  |                                                                                     |                                                                                     | 321                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 653                                                                               |                                                                                   |                                                                                   | 178                                                                               |                                                                                   |                                                                                     | 1046                                                                                |                                                                                     |                                                                                     | 778                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 9.9                                                                               |                                                                                   |                                                                                   | 4.9                                                                               |                                                                                   |                                                                                     | 15.8                                                                                |                                                                                     |                                                                                     | 11.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.94                                                                                | 0.94                                                                                | 0.94                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 576                                                                               | 42                                                                                | 29                                                                                | 41                                                                                | 31                                                                                | 8                                                                                 | 43                                                                                  | 1744                                                                                | 121                                                                                 | 8                                                                                   | 1276                                                                                | 509                                                                                 |
| Shared Lane Traffic (%)    | 47%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 305                                                                               | 313                                                                               | 29                                                                                | 0                                                                                 | 72                                                                                | 8                                                                                 | 43                                                                                  | 1744                                                                                | 121                                                                                 | 8                                                                                   | 1276                                                                                | 509                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 0.99                                                                              | 0.99                                                                              | 0.99                                                                              | 1.07                                                                              | 1.07                                                                              | 1.07                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Split                                                                             | NA                                                                                | Perm                                                                              | Split                                                                             | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | Perm                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 3                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 3                                                                                 | 3                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 36.7                                                                              | 36.7                                                                              | 36.7                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                                | 28.8                                                                                | 28.8                                                                                | 30.8                                                                                | 30.8                                                                                | 30.8                                                                                |

# Lanier Tract DRI

## 10: Dawsonville Highway & Shallowford Rd/Best Buy

existing p.m.

|                         |  |       |       |       |       |       |      |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL  | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 37.0                                                                               | 37.0  | 37.0  | 38.9  | 38.9  | 38.9  | 10.8 | 84.1  | 84.1  | 73.3  | 73.3  | 73.3  |
| Total Split (%)         | 23.1%                                                                              | 23.1% | 23.1% | 24.3% | 24.3% | 24.3% | 6.8% | 52.6% | 52.6% | 45.8% | 45.8% | 45.8% |
| Maximum Green (s)       | 30.3                                                                               | 30.3  | 30.3  | 33.0  | 33.0  | 33.0  | 5.0  | 77.3  | 77.3  | 66.5  | 66.5  | 66.5  |
| Yellow Time (s)         | 4.5                                                                                | 4.5   | 4.5   | 3.0   | 3.0   | 3.0   | 3.0  | 4.9   | 4.9   | 4.9   | 4.9   | 4.9   |
| All-Red Time (s)        | 2.2                                                                                | 2.2   | 2.2   | 2.9   | 2.9   | 2.9   | 2.8  | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.7                                                                                | 6.7   | 6.7   |       | 5.9   | 5.9   | 5.8  | 6.8   | 6.8   | 6.8   | 6.8   | 6.8   |
| Lead/Lag                | Lead                                                                               | Lead  | Lead  | Lag   | Lag   | Lag   | Lead |       |       | Lag   | Lag   | Lag   |
| Lead-Lag Optimize?      | Yes                                                                                | Yes   | Yes   | Yes   | Yes   | Yes   | Yes  |       |       | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None | C-Min | C-Min | C-Min | C-Min | C-Min |
| Walk Time (s)           | 4.0                                                                                | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 26.0                                                                               | 26.0  | 26.0  | 29.0  | 29.0  | 29.0  |      | 18.0  | 18.0  | 20.0  | 20.0  | 20.0  |
| Pedestrian Calls (#/hr) | 0                                                                                  | 0     | 0     | 0     | 0     | 0     |      | 0     | 0     | 0     | 0     | 0     |
| Act Effect Green (s)    | 32.0                                                                               | 32.0  | 32.0  |       | 11.9  | 11.9  | 97.7 | 96.7  | 96.7  | 86.2  | 86.2  | 86.2  |
| Actuated g/C Ratio      | 0.20                                                                               | 0.20  | 0.20  |       | 0.07  | 0.07  | 0.61 | 0.60  | 0.60  | 0.54  | 0.54  | 0.54  |
| v/c Ratio               | 0.88                                                                               | 0.90  | 0.07  |       | 0.55  | 0.04  | 0.21 | 0.78  | 0.12  | 0.13  | 0.65  | 0.50  |
| Control Delay           | 88.1                                                                               | 90.1  | 0.3   |       | 86.7  | 0.3   | 15.7 | 27.6  | 7.1   | 51.9  | 55.6  | 32.8  |
| Queue Delay             | 1.0                                                                                | 1.2   | 0.0   |       | 0.0   | 0.0   | 0.0  | 7.4   | 0.0   | 0.0   | 2.0   | 0.4   |
| Total Delay             | 89.1                                                                               | 91.3  | 0.3   |       | 86.7  | 0.3   | 15.7 | 34.9  | 7.1   | 51.9  | 57.6  | 33.2  |
| LOS                     | F                                                                                  | F     | A     |       | F     | A     | B    | C     | A     | D     | E     | C     |
| Approach Delay          |                                                                                    | 86.2  |       |       | 78.0  |       |      | 32.7  |       |       | 50.7  |       |
| Approach LOS            |                                                                                    | F     |       |       | E     |       |      | C     |       |       | D     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 91 (57%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 48.6

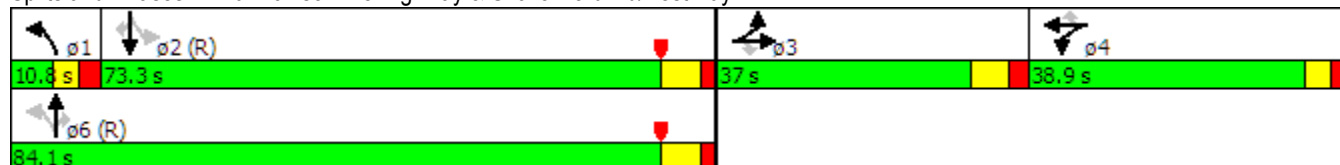
Intersection LOS: D

Intersection Capacity Utilization 81.0%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 10: Dawsonville Highway & Shallowford Rd/Best Buy



## Appendix D

### No-Build Intersection Analysis

Lanier Tract DRI  
1: Sportsman Club Road & Strickland Drive

no build a.m.

| Intersection             |        |          |        |      |        |      |
|--------------------------|--------|----------|--------|------|--------|------|
| Int Delay, s/veh         | 2.6    |          |        |      |        |      |
|                          |        |          |        |      |        |      |
| Movement                 | WBL    | WBR      | NBT    | NBR  | SBL    | SBT  |
| Vol, veh/h               | 11     | 0        | 7      | 1    | 0      | 25   |
| Conflicting Peds, #/hr   | 0      | 0        | 0      | 0    | 0      | 0    |
| Sign Control             | Stop   | Stop     | Free   | Free | Free   | Free |
| RT Channelized           | -      | None     | -      | None | -      | None |
| Storage Length           | 0      | -        | -      | -    | -      | -    |
| Veh in Median Storage, # | 0      | -        | 0      | -    | -      | 0    |
| Grade, %                 | 0      | -        | 0      | -    | -      | 0    |
| Peak Hour Factor         | 50     | 50       | 58     | 58   | 64     | 64   |
| Heavy Vehicles, %        | 2      | 2        | 2      | 2    | 2      | 2    |
| Mvmt Flow                | 22     | 0        | 12     | 2    | 0      | 39   |
|                          |        |          |        |      |        |      |
| Major/Minor              | Minor1 |          | Major1 |      | Major2 |      |
| Conflicting Flow All     | 52     | 13       | 0      | 0    | 14     | 0    |
| Stage 1                  | 13     | -        | -      | -    | -      | -    |
| Stage 2                  | 39     | -        | -      | -    | -      | -    |
| Critical Hdwy            | 6.42   | 6.22     | -      | -    | 4.12   | -    |
| Critical Hdwy Stg 1      | 5.42   | -        | -      | -    | -      | -    |
| Critical Hdwy Stg 2      | 5.42   | -        | -      | -    | -      | -    |
| Follow-up Hdwy           | 3.518  | 3.318    | -      | -    | 2.218  | -    |
| Pot Cap-1 Maneuver       | 957    | 1067     | -      | -    | 1604   | -    |
| Stage 1                  | 1010   | -        | -      | -    | -      | -    |
| Stage 2                  | 983    | -        | -      | -    | -      | -    |
| Platoon blocked, %       |        |          | -      | -    |        | -    |
| Mov Cap-1 Maneuver       | 957    | 1067     | -      | -    | 1604   | -    |
| Mov Cap-2 Maneuver       | 957    | -        | -      | -    | -      | -    |
| Stage 1                  | 1010   | -        | -      | -    | -      | -    |
| Stage 2                  | 983    | -        | -      | -    | -      | -    |
|                          |        |          |        |      |        |      |
| Approach                 | WB     |          | NB     |      | SB     |      |
| HCM Control Delay, s     | 8.9    |          | 0      |      | 0      |      |
| HCM LOS                  | A      |          |        |      |        |      |
|                          |        |          |        |      |        |      |
| Minor Lane/Major Mvmt    | NBT    | NBRWBLn1 | SBL    | SBT  |        |      |
| Capacity (veh/h)         | -      | - 957    | 1604   | -    |        |      |
| HCM Lane V/C Ratio       | -      | - 0.023  | -      | -    |        |      |
| HCM Control Delay (s)    | -      | - 8.9    | 0      | -    |        |      |
| HCM Lane LOS             | -      | - A      | A      | -    |        |      |
| HCM 95th %tile Q(veh)    | -      | - 0.1    | 0      | -    |        |      |

Lanier Tract DRI  
2: GA 53 & Sportsman Club Road

no build a.m.

| Intersection     |      |  |  |  |  |  |  |  |  |  |  |  |
|------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Int Delay, s/veh | 11.8 |  |  |  |  |  |  |  |  |  |  |  |

| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol, veh/h               | 10   | 1863 | 0    | 0    | 820  | 9    | 0    | 0    | 0    | 28   | 0    | 17   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 86   | 86   | 86   | 84   | 84   | 84   | 92   | 92   | 92   | 59   | 59   | 59   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 12   | 2166 | 0    | 0    | 976  | 11   | 0    | 0    | 0    | 47   | 0    | 29   |

| Major/Minor          | Major1 |   |   | Major2 |   |   | Minor1 |      |      | Minor2 |      |      |
|----------------------|--------|---|---|--------|---|---|--------|------|------|--------|------|------|
| Conflicting Flow All | 987    | 0 | 0 | 2166   | 0 | 0 | 2678   | 3177 | 1083 | 2088   | 3172 | 493  |
| Stage 1              | -      | - | - | -      | - | - | 2190   | 2190 | -    | 982    | 982  | -    |
| Stage 2              | -      | - | - | -      | - | - | 488    | 987  | -    | 1106   | 2190 | -    |
| Critical Hdwy        | 4.14   | - | - | 4.14   | - | - | 7.54   | 6.54 | 6.94 | 7.54   | 6.54 | 6.94 |
| Critical Hdwy Stg 1  | -      | - | - | -      | - | - | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    |
| Critical Hdwy Stg 2  | -      | - | - | -      | - | - | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    |
| Follow-up Hdwy       | 2.22   | - | - | 2.22   | - | - | 3.52   | 4.02 | 3.32 | 3.52   | 4.02 | 3.32 |
| Pot Cap-1 Maneuver   | 696    | - | - | 243    | - | - | 11     | 10   | 213  | ~ 30   | 10   | 522  |
| Stage 1              | -      | - | - | -      | - | - | 46     | 82   | -    | 267    | 325  | -    |
| Stage 2              | -      | - | - | -      | - | - | 530    | 324  | -    | 224    | 82   | -    |
| Platoon blocked, %   | -      | - | - | -      | - | - | -      | -    | -    | -      | -    | -    |
| Mov Cap-1 Maneuver   | 696    | - | - | 243    | - | - | 10     | 10   | 213  | ~ 30   | 10   | 522  |
| Mov Cap-2 Maneuver   | -      | - | - | -      | - | - | 10     | 10   | -    | ~ 30   | 10   | -    |
| Stage 1              | -      | - | - | -      | - | - | 45     | 81   | -    | 262    | 325  | -    |
| Stage 2              | -      | - | - | -      | - | - | 501    | 324  | -    | 220    | 81   | -    |

| Approach             | EB  | WB | NB | SB       |
|----------------------|-----|----|----|----------|
| HCM Control Delay, s | 0.1 | 0  | 0  | \$ 496.6 |
| HCM LOS              |     |    | A  | F        |

| Minor Lane/Major Mvmt | NBLn1 | EBL   | EBT | EBR | WBL | WBT | WBR | SBLn1    |
|-----------------------|-------|-------|-----|-----|-----|-----|-----|----------|
| Capacity (veh/h)      | -     | 696   | -   | -   | 243 | -   | -   | 47       |
| HCM Lane V/C Ratio    | -     | 0.017 | -   | -   | -   | -   | -   | 1.623    |
| HCM Control Delay (s) | 0     | 10.3  | -   | -   | 0   | -   | -   | \$ 496.6 |
| HCM Lane LOS          | A     | B     | -   | -   | A   | -   | -   | F        |
| HCM 95th %tile Q(veh) | -     | 0.1   | -   | -   | 0   | -   | -   | 7.5      |

| Notes                                                                                                                |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |  |  |  |  |  |  |  |  |  |  |  |  |



Lanier Tract DRI  
3: GA 53 & Avonlea Way

no build a.m.

| Intersection                                                                                                         |        |        |       |        |      |      |
|----------------------------------------------------------------------------------------------------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh                                                                                                     | 4.5    |        |       |        |      |      |
| Movement                                                                                                             | EBL    | EBR    | NBL   | NBT    | SBT  | SBR  |
| Vol, veh/h                                                                                                           | 17     | 79     | 13    | 836    | 1842 | 7    |
| Conflicting Peds, #/hr                                                                                               | 0      | 0      | 0     | 0      | 0    | 0    |
| Sign Control                                                                                                         | Stop   | Stop   | Free  | Free   | Free | Free |
| RT Channelized                                                                                                       | -      | None   | -     | None   | -    | None |
| Storage Length                                                                                                       | 0      | 0      | 0     | -      | -    | 0    |
| Veh in Median Storage, #                                                                                             | 0      | -      | -     | 0      | 0    | -    |
| Grade, %                                                                                                             | 0      | -      | -     | 0      | 0    | -    |
| Peak Hour Factor                                                                                                     | 84     | 84     | 88    | 88     | 86   | 86   |
| Heavy Vehicles, %                                                                                                    | 2      | 2      | 2     | 2      | 2    | 2    |
| Mvmt Flow                                                                                                            | 20     | 94     | 15    | 950    | 2142 | 8    |
| Major/Minor                                                                                                          | Minor2 | Major1 |       | Major2 |      |      |
| Conflicting Flow All                                                                                                 | 2647   | 1071   | 2142  | 0      | -    | 0    |
| Stage 1                                                                                                              | 2142   | -      | -     | -      | -    | -    |
| Stage 2                                                                                                              | 505    | -      | -     | -      | -    | -    |
| Critical Hdwy                                                                                                        | 6.84   | 6.94   | 4.14  | -      | -    | -    |
| Critical Hdwy Stg 1                                                                                                  | 5.84   | -      | -     | -      | -    | -    |
| Critical Hdwy Stg 2                                                                                                  | 5.84   | -      | -     | -      | -    | -    |
| Follow-up Hdwy                                                                                                       | 3.52   | 3.32   | 2.22  | -      | -    | -    |
| Pot Cap-1 Maneuver                                                                                                   | ~ 19   | 217    | 249   | -      | -    | -    |
| Stage 1                                                                                                              | 76     | -      | -     | -      | -    | -    |
| Stage 2                                                                                                              | 571    | -      | -     | -      | -    | -    |
| Platoon blocked, %                                                                                                   |        |        |       | -      | -    | -    |
| Mov Cap-1 Maneuver                                                                                                   | ~ 18   | 217    | 249   | -      | -    | -    |
| Mov Cap-2 Maneuver                                                                                                   | ~ 18   | -      | -     | -      | -    | -    |
| Stage 1                                                                                                              | 76     | -      | -     | -      | -    | -    |
| Stage 2                                                                                                              | 537    | -      | -     | -      | -    | -    |
| Approach                                                                                                             | EB     | NB     |       | SB     |      |      |
| HCM Control Delay, s                                                                                                 | 125.5  | 0.3    |       | 0      |      |      |
| HCM LOS                                                                                                              | F      |        |       |        |      |      |
| Minor Lane/Major Mvmt                                                                                                | NBL    | NBT    | EBLn1 | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)                                                                                                     | 249    | -      | 18    | 217    | -    | -    |
| HCM Lane V/C Ratio                                                                                                   | 0.059  | -      | 1.124 | 0.433  | -    | -    |
| HCM Control Delay (s)                                                                                                | 20.4   | -      | 552.3 | 33.7   | -    | -    |
| HCM Lane LOS                                                                                                         | C      | -      | F     | D      | -    | -    |
| HCM 95th %tile Q(veh)                                                                                                | 0.2    | -      | 2.9   | 2      | -    | -    |
| Notes                                                                                                                |        |        |       |        |      |      |
| ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |        |        |       |        |      |      |

Lanier Tract DRI  
4: GA 53 & Canterbury Road

no build a.m.

| Intersection                                                                                                         |        |        |       |        |      |      |
|----------------------------------------------------------------------------------------------------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh                                                                                                     | 6.7    |        |       |        |      |      |
| Movement                                                                                                             | EBL    | EBR    | NBL   | NBT    | SBT  | SBR  |
| Vol, veh/h                                                                                                           | 20     | 105    | 25    | 797    | 1969 | 8    |
| Conflicting Peds, #/hr                                                                                               | 0      | 0      | 0     | 0      | 0    | 0    |
| Sign Control                                                                                                         | Stop   | Stop   | Free  | Free   | Free | Free |
| RT Channelized                                                                                                       | -      | None   | -     | None   | -    | None |
| Storage Length                                                                                                       | 0      | 0      | 0     | -      | -    | 0    |
| Veh in Median Storage, #                                                                                             | 0      | -      | -     | 0      | 0    | -    |
| Grade, %                                                                                                             | 0      | -      | -     | 0      | 0    | -    |
| Peak Hour Factor                                                                                                     | 88     | 88     | 86    | 86     | 91   | 91   |
| Heavy Vehicles, %                                                                                                    | 2      | 2      | 2     | 2      | 2    | 2    |
| Mvmt Flow                                                                                                            | 23     | 119    | 29    | 927    | 2164 | 9    |
| Major/Minor                                                                                                          | Minor2 | Major1 |       | Major2 |      |      |
| Conflicting Flow All                                                                                                 | 2686   | 1082   | 2164  | 0      | -    | 0    |
| Stage 1                                                                                                              | 2164   | -      | -     | -      | -    | -    |
| Stage 2                                                                                                              | 522    | -      | -     | -      | -    | -    |
| Critical Hdwy                                                                                                        | 6.84   | 6.94   | 4.14  | -      | -    | -    |
| Critical Hdwy Stg 1                                                                                                  | 5.84   | -      | -     | -      | -    | -    |
| Critical Hdwy Stg 2                                                                                                  | 5.84   | -      | -     | -      | -    | -    |
| Follow-up Hdwy                                                                                                       | 3.52   | 3.32   | 2.22  | -      | -    | -    |
| Pot Cap-1 Maneuver                                                                                                   | ~ 18   | 213    | 244   | -      | -    | -    |
| Stage 1                                                                                                              | 74     | -      | -     | -      | -    | -    |
| Stage 2                                                                                                              | 560    | -      | -     | -      | -    | -    |
| Platoon blocked, %                                                                                                   |        |        |       | -      | -    | -    |
| Mov Cap-1 Maneuver                                                                                                   | ~ 16   | 213    | 244   | -      | -    | -    |
| Mov Cap-2 Maneuver                                                                                                   | ~ 16   | -      | -     | -      | -    | -    |
| Stage 1                                                                                                              | 74     | -      | -     | -      | -    | -    |
| Stage 2                                                                                                              | 493    | -      | -     | -      | -    | -    |
| Approach                                                                                                             | EB     | NB     |       | SB     |      |      |
| HCM Control Delay, s                                                                                                 | 149.3  | 0.7    |       | 0      |      |      |
| HCM LOS                                                                                                              | F      |        |       |        |      |      |
| Minor Lane/Major Mvmt                                                                                                | NBL    | NBT    | EBLn1 | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)                                                                                                     | 244    | -      | 16    | 213    | -    | -    |
| HCM Lane V/C Ratio                                                                                                   | 0.119  | -      | 1.42  | 0.56   | -    | -    |
| HCM Control Delay (s)                                                                                                | 21.7   | -      | 715.5 | 41.5   | -    | -    |
| HCM Lane LOS                                                                                                         | C      | -      | F     | E      | -    | -    |
| HCM 95th %tile Q(veh)                                                                                                | 0.4    | -      | 3.4   | 3      | -    | -    |
| Notes                                                                                                                |        |        |       |        |      |      |
| ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |        |        |       |        |      |      |

Lanier Tract DRI  
7: GA 53 & Beechwood Boulevard

no build a.m.

| Intersection             |        |        |       |        |      |      |
|--------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh         | 2.6    |        |       |        |      |      |
| Movement                 | EBL    | EBR    | NBL   | NBT    | SBT  | SBR  |
| Vol, veh/h               | 6      | 45     | 30    | 869    | 2215 | 2    |
| Conflicting Peds, #/hr   | 0      | 0      | 0     | 0      | 0    | 0    |
| Sign Control             | Stop   | Stop   | Free  | Free   | Free | Free |
| RT Channelized           | -      | Yield  | -     | Yield  | -    | None |
| Storage Length           | 0      | 0      | 200   | -      | -    | 360  |
| Veh in Median Storage, # | 0      | -      | -     | 0      | 0    | -    |
| Grade, %                 | 0      | -      | -     | 1      | 0    | -    |
| Peak Hour Factor         | 82     | 82     | 87    | 87     | 89   | 89   |
| Heavy Vehicles, %        | 0      | 0      | 0     | 1      | 0    | 0    |
| Mvmt Flow                | 7      | 55     | 34    | 999    | 2489 | 2    |
| Major/Minor              | Minor2 | Major1 |       | Major2 |      |      |
| Conflicting Flow All     | 3057   | 1244   | 2489  | 0      | -    | 0    |
| Stage 1                  | 2489   | -      | -     | -      | -    | -    |
| Stage 2                  | 568    | -      | -     | -      | -    | -    |
| Critical Hdwy            | 6.8    | 6.9    | 4.1   | -      | -    | -    |
| Critical Hdwy Stg 1      | 5.8    | -      | -     | -      | -    | -    |
| Critical Hdwy Stg 2      | 5.8    | -      | -     | -      | -    | -    |
| Follow-up Hdwy           | 3.5    | 3.3    | 2.2   | -      | -    | -    |
| Pot Cap-1 Maneuver       | 10     | 169    | 187   | -      | -    | -    |
| Stage 1                  | 50     | -      | -     | -      | -    | -    |
| Stage 2                  | 536    | -      | -     | -      | -    | -    |
| Platoon blocked, %       |        |        |       | -      | -    | -    |
| Mov Cap-1 Maneuver       | 8      | 169    | 187   | -      | -    | -    |
| Mov Cap-2 Maneuver       | 8      | -      | -     | -      | -    | -    |
| Stage 1                  | 50     | -      | -     | -      | -    | -    |
| Stage 2                  | 439    | -      | -     | -      | -    | -    |
| Approach                 | EB     | NB     |       | SB     |      |      |
| HCM Control Delay, s     | 133.9  | 1      |       | 0      |      |      |
| HCM LOS                  | F      |        |       |        |      |      |
| Minor Lane/Major Mvmt    | NBL    | NBT    | EBLn1 | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)         | 187    | -      | 8     | 169    | -    | -    |
| HCM Lane V/C Ratio       | 0.184  | -      | 0.915 | 0.325  | -    | -    |
| HCM Control Delay (s)    | 28.6   | -      | 866.6 | 36.2   | -    | -    |
| HCM Lane LOS             | D      | -      | F     | E      | -    | -    |
| HCM 95th %tile Q(veh)    | 0.7    | -      | 1.6   | 1.3    | -    | -    |

## Lanier Tract DRI

## 5: GA 53 &amp; Lanier Valley Dr/Ahaluna Dr

no build a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Volume (vph)               | 21                                                                                | 6                                                                                 | 127                                                                               | 41                                                                                | 3                                                                                 | 22                                                                                | 61                                                                                  | 774                                                                                 | 12                                                                                  | 15                                                                                  | 2099                                                                                | 0                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 2%                                                                                |                                                                                   |                                                                                   | -4%                                                                               |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 100                                                                                 |                                                                                     | 0                                                                                   | 140                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.889                                                                             |                                                                                   |                                                                                   | 0.954                                                                             |                                                                                   |                                                                                     | 0.998                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   | 0.993                                                                             |                                                                                   |                                                                                   | 0.970                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1661                                                                              | 0                                                                                 | 0                                                                                 | 1793                                                                              | 0                                                                                 | 1796                                                                                | 3516                                                                                | 0                                                                                   | 1814                                                                                | 3628                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.940                                                                             |                                                                                   |                                                                                   | 0.380                                                                             |                                                                                   | 0.035                                                                               |                                                                                     |                                                                                     | 0.309                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1572                                                                              | 0                                                                                 | 0                                                                                 | 703                                                                               | 0                                                                                 | 66                                                                                  | 3516                                                                                | 0                                                                                   | 590                                                                                 | 3628                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 71                                                                                |                                                                                   |                                                                                   | 14                                                                                |                                                                                   |                                                                                     | 4                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 340                                                                               |                                                                                   |                                                                                   | 322                                                                               |                                                                                   |                                                                                     | 888                                                                                 |                                                                                     |                                                                                     | 1417                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.7                                                                               |                                                                                   |                                                                                   | 7.3                                                                               |                                                                                   |                                                                                     | 13.5                                                                                |                                                                                     |                                                                                     | 21.5                                                                                |                                                                                     |
| Peak Hour Factor           | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.83                                                                              | 0.83                                                                              | 0.83                                                                              | 0.85                                                                                | 0.85                                                                                | 0.85                                                                                | 0.87                                                                                | 0.87                                                                                | 0.87                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 23                                                                                | 7                                                                                 | 140                                                                               | 49                                                                                | 4                                                                                 | 27                                                                                | 72                                                                                  | 911                                                                                 | 14                                                                                  | 17                                                                                  | 2413                                                                                | 0                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 170                                                                               | 0                                                                                 | 0                                                                                 | 80                                                                                | 0                                                                                 | 72                                                                                  | 925                                                                                 | 0                                                                                   | 17                                                                                  | 2413                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 |                                                                                     | 0                                                                                   | 336                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   |                                                                                     | 0                                                                                   | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 8                                                                                 | 8                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 10.6                                                                                | 23.0                                                                                |                                                                                     | 23.0                                                                                | 23.0                                                                                |                                                                                     |

# Lanier Tract DRI

## 5: GA 53 & Lanier Valley Dr/Ahaluna Dr

no build a.m.

|                       |  |       |     |       |       |     |       |       |     |       |       |     |
|-----------------------|------------------------------------------------------------------------------------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Lane Group            | EBL                                                                                | EBT   | EBR | WBL   | WBT   | WBR | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
| Total Split (s)       | 24.0                                                                               | 24.0  |     | 24.0  | 24.0  |     | 12.0  | 126.0 |     | 114.0 | 114.0 |     |
| Total Split (%)       | 16.0%                                                                              | 16.0% |     | 16.0% | 16.0% |     | 8.0%  | 84.0% |     | 76.0% | 76.0% |     |
| Maximum Green (s)     | 17.4                                                                               | 17.4  |     | 17.4  | 17.4  |     | 6.4   | 119.9 |     | 107.9 | 107.9 |     |
| Yellow Time (s)       | 4.0                                                                                | 4.0   |     | 4.0   | 4.0   |     | 3.0   | 4.5   |     | 4.5   | 4.5   |     |
| All-Red Time (s)      | 2.6                                                                                | 2.6   |     | 2.6   | 2.6   |     | 2.6   | 1.6   |     | 1.6   | 1.6   |     |
| Lost Time Adjust (s)  |                                                                                    | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Lost Time (s)   |                                                                                    | 6.6   |     |       | 6.6   |     | 5.6   | 6.1   |     | 6.1   | 6.1   |     |
| Lead/Lag              |                                                                                    |       |     |       |       |     | Lead  |       |     | Lag   | Lag   |     |
| Lead-Lag Optimize?    |                                                                                    |       |     |       |       |     | Yes   |       |     | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0                                                                                | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode           | None                                                                               | None  |     | None  | None  |     | None  | C-Max |     | C-Max | C-Max |     |
| Act Effect Green (s)  |                                                                                    | 15.4  |     |       | 15.4  |     | 122.4 | 121.9 |     | 110.1 | 110.1 |     |
| Actuated g/C Ratio    |                                                                                    | 0.10  |     |       | 0.10  |     | 0.82  | 0.81  |     | 0.73  | 0.73  |     |
| v/c Ratio             |                                                                                    | 0.76  |     |       | 0.95  |     | 0.58  | 0.32  |     | 0.04  | 0.91  |     |
| Control Delay         |                                                                                    | 58.3  |     |       | 139.1 |     | 52.0  | 2.0   |     | 6.3   | 22.8  |     |
| Queue Delay           |                                                                                    | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay           |                                                                                    | 58.3  |     |       | 139.1 |     | 52.0  | 2.0   |     | 6.3   | 22.8  |     |
| LOS                   |                                                                                    | E     |     |       | F     |     | D     | A     |     | A     | C     |     |
| Approach Delay        |                                                                                    | 58.3  |     |       | 139.1 |     |       | 5.6   |     |       | 22.7  |     |
| Approach LOS          |                                                                                    | E     |     |       | F     |     |       | A     |     |       | C     |     |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 26 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 22.3

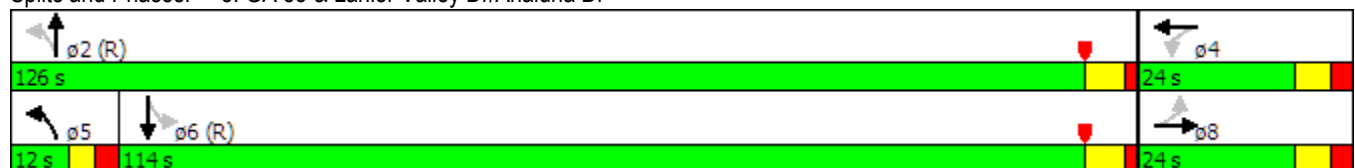
Intersection LOS: C

Intersection Capacity Utilization 80.9%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 5: GA 53 & Lanier Valley Dr/Ahaluna Dr



## Lanier Tract DRI

## 6: 53-Dawsonville Hwy &amp; Academy Sports

no build a.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |  |  |  |  |  |  |  |
| Volume (vph)               | 2                                                                                 | 0                                                                                 | 7                                                                                 | 2                                                                                 | 0                                                                                 | 0                                                                                 | 12                                                                                  | 817                                                                                 | 10                                                                                  | 6                                                                                   | 2196                                                                                | 4                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 4%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 70                                                                                | 200                                                                                 |                                                                                     | 170                                                                                 | 190                                                                                 |                                                                                     | 360                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1805                                                                              | 1900                                                                              | 1615                                                                              | 1769                                                                              | 1862                                                                              | 1862                                                                              | 1796                                                                                | 3556                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 0.037                                                                               |                                                                                     |                                                                                     | 0.299                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1900                                                                              | 1900                                                                              | 1615                                                                              | 1862                                                                              | 1862                                                                              | 1862                                                                              | 70                                                                                  | 3556                                                                                | 1607                                                                                | 568                                                                                 | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 67                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 68                                                                                  |                                                                                     |                                                                                     | 68                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 262                                                                               |                                                                                   |                                                                                   | 246                                                                               |                                                                                   |                                                                                     | 1836                                                                                |                                                                                     |                                                                                     | 685                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.1                                                                               |                                                                                   |                                                                                   | 6.7                                                                               |                                                                                   |                                                                                     | 27.8                                                                                |                                                                                     |                                                                                     | 10.4                                                                                |                                                                                     |
| Peak Hour Factor           | 0.67                                                                              | 0.67                                                                              | 0.67                                                                              | 0.50                                                                              | 0.50                                                                              | 0.50                                                                              | 0.86                                                                                | 0.86                                                                                | 0.86                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 3                                                                                 | 0                                                                                 | 10                                                                                | 4                                                                                 | 0                                                                                 | 0                                                                                 | 14                                                                                  | 950                                                                                 | 12                                                                                  | 7                                                                                   | 2440                                                                                | 4                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 3                                                                                 | 0                                                                                 | 10                                                                                | 4                                                                                 | 0                                                                                 | 0                                                                                 | 14                                                                                  | 950                                                                                 | 12                                                                                  | 7                                                                                   | 2440                                                                                | 4                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              |                                                                                   | Perm                                                                              | Perm                                                                              |                                                                                   | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 2                                                                                   |                                                                                     | 2                                                                                   | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 42.0                                                                              | 42.0                                                                              | 42.0                                                                              | 42.4                                                                              | 42.4                                                                              | 42.4                                                                              | 11.4                                                                                | 30.3                                                                                | 30.3                                                                                | 11.0                                                                                | 29.3                                                                                | 29.3                                                                                |

# Lanier Tract DRI

## 6: 53-Dawsonville Hwy & Academy Sports

no build a.m.

|                         |  |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 42.4                                                                               | 42.4  | 42.4  | 42.4  | 42.4  | 42.4  | 11.4  | 96.6  | 96.6  | 11.0  | 96.2  | 96.2  |
| Total Split (%)         | 28.3%                                                                              | 28.3% | 28.3% | 28.3% | 28.3% | 28.3% | 7.6%  | 64.4% | 64.4% | 7.3%  | 64.1% | 64.1% |
| Maximum Green (s)       | 36.0                                                                               | 36.0  | 36.0  | 36.0  | 36.0  | 36.0  | 5.0   | 90.4  | 90.4  | 5.0   | 90.0  | 90.0  |
| Yellow Time (s)         | 3.4                                                                                | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 4.3   | 4.3   | 3.0   | 4.3   | 4.3   |
| All-Red Time (s)        | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 1.9   | 1.9   | 3.0   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.4                                                                                | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.2   | 6.2   | 6.0   | 6.2   | 6.2   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           | 4.0                                                                                | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 23.0                                                                               | 23.0  | 23.0  | 32.0  | 32.0  | 32.0  |       | 20.0  | 20.0  |       | 19.0  | 19.0  |
| Pedestrian Calls (#/hr) | 0                                                                                  | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    | 6.1                                                                                |       | 6.1   | 6.1   |       |       | 137.2 | 139.9 | 139.9 | 136.1 | 137.4 | 137.4 |
| Actuated g/C Ratio      | 0.04                                                                               |       | 0.04  | 0.04  |       |       | 0.91  | 0.93  | 0.93  | 0.91  | 0.92  | 0.92  |
| v/c Ratio               | 0.04                                                                               |       | 0.08  | 0.05  |       |       | 0.11  | 0.29  | 0.01  | 0.01  | 0.74  | 0.00  |
| Control Delay           | 69.5                                                                               |       | 1.1   | 70.0  |       |       | 4.4   | 0.9   | 0.0   | 0.8   | 3.9   | 0.0   |
| Queue Delay             | 0.0                                                                                |       | 0.0   | 0.0   |       |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay             | 69.5                                                                               |       | 1.1   | 70.0  |       |       | 4.4   | 0.9   | 0.0   | 0.8   | 3.9   | 0.0   |
| LOS                     | E                                                                                  |       | A     | E     |       |       | A     | A     | A     | A     | A     | A     |
| Approach Delay          |                                                                                    |       |       |       |       |       |       | 1.0   |       |       | 3.9   |       |
| Approach LOS            |                                                                                    |       |       |       |       |       |       | A     |       |       | A     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 27 (18%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 145

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 3.2

Intersection LOS: A

Intersection Capacity Utilization 84.9%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 6: 53-Dawsonville Hwy & Academy Sports

|                                                                                        |                                                                                            |                                                                                          |
|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
|  p1 |  p2 (R) |  p4 |
| 11 s                                                                                   | 96.6 s                                                                                     | 42.4 s                                                                                   |
|  p5 |  p6 (R) |  p8 |
| 11.4 s                                                                                 | 96.2 s                                                                                     | 42.4 s                                                                                   |

## Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 &amp; McEver Road/McEver

no build a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |                                                                                   |   |  |  |  |  |  |
| Volume (vph)               | 431                                                                               | 31                                                                                | 378                                                                               | 46                                                                                | 21                                                                                | 20                                                                                | 311                                                                                 | 513                                                                                 | 61                                                                                  | 31                                                                                  | 1292                                                                                | 914                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 1%                                                                                |                                                                                   |                                                                                   | 5%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 180                                                                               |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 310                                                                                 |                                                                                     | 185                                                                                 | 255                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 50                                                                                |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.872                                                                             | 0.850                                                                             |                                                                                   | 0.927                                                                             |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 3484                                                                              | 1566                                                                              | 1527                                                                              | 1760                                                                              | 1717                                                                              | 0                                                                                 | 3484                                                                                | 3487                                                                                | 1575                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   | 0.598                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 3484                                                                              | 1566                                                                              | 1527                                                                              | 1108                                                                              | 1717                                                                              | 0                                                                                 | 3484                                                                                | 3487                                                                                | 1575                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 183                                                                               | 207                                                                               |                                                                                   | 31                                                                                |                                                                                   |                                                                                     |                                                                                     | 184                                                                                 |                                                                                     |                                                                                     | 544                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 45                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 580                                                                               |                                                                                   |                                                                                   | 331                                                                               |                                                                                   |                                                                                     | 921                                                                                 |                                                                                     |                                                                                     | 1624                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 8.8                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                     | 14.0                                                                                |                                                                                     |                                                                                     | 24.6                                                                                |                                                                                     |
| Peak Hour Factor           | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.62                                                                              | 0.62                                                                              | 0.62                                                                              | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 3%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 444                                                                               | 32                                                                                | 390                                                                               | 74                                                                                | 34                                                                                | 32                                                                                | 334                                                                                 | 552                                                                                 | 66                                                                                  | 34                                                                                  | 1436                                                                                | 1016                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   | 47%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 444                                                                               | 215                                                                               | 207                                                                               | 74                                                                                | 66                                                                                | 0                                                                                 | 334                                                                                 | 552                                                                                 | 66                                                                                  | 34                                                                                  | 1436                                                                                | 1016                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 24                                                                                |                                                                                   |                                                                                   | 24                                                                                |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                             | NA                                                                                |                                                                                   | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 8                                                                                 |                                                                                   | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 8                                                                                 | 8                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 13.2                                                                              | 50.2                                                                              | 50.2                                                                              | 11.6                                                                              | 48.2                                                                              |                                                                                   | 13.4                                                                                | 35.6                                                                                | 35.6                                                                                | 12.9                                                                                | 44.6                                                                                | 44.6                                                                                |



# Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 & McEver Road/McEver

no build a.m.

|                         |  |       |       |      |       |     |       |       |       |      |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|------|-------|-----|-------|-------|-------|------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL  | WBT   | WBR | NBL   | NBT   | NBR   | SBL  | SBT   | SBR   |
| Total Split (s)         | 23.0                                                                               | 59.1  | 59.1  | 12.1 | 48.2  |     | 20.0  | 64.6  | 64.6  | 14.2 | 58.8  | 58.8  |
| Total Split (%)         | 15.3%                                                                              | 39.4% | 39.4% | 8.1% | 32.1% |     | 13.3% | 43.1% | 43.1% | 9.5% | 39.2% | 39.2% |
| Maximum Green (s)       | 15.7                                                                               | 51.8  | 51.8  | 5.6  | 40.9  |     | 12.5  | 58.0  | 58.0  | 7.0  | 52.2  | 52.2  |
| Yellow Time (s)         | 4.3                                                                                | 4.3   | 4.3   | 3.5  | 4.3   |     | 4.5   | 4.4   | 4.4   | 4.2  | 4.4   | 4.4   |
| All-Red Time (s)        | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 2.2   | 2.2   | 3.0  | 2.2   | 2.2   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Lost Time (s)     | 7.3                                                                                | 7.3   | 7.3   | 6.5  | 7.3   |     | 7.5   | 6.6   | 6.6   | 7.2  | 6.6   | 6.6   |
| Lead/Lag                | Lead                                                                               | Lag   | Lag   | Lead | Lag   |     | Lag   | Lag   | Lag   | Lead | Lead  | Lead  |
| Lead-Lag Optimize?      | Yes                                                                                | Yes   | Yes   | Yes  | Yes   |     | Yes   | Yes   | Yes   | Yes  | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None | None  |     | None  | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s)           |                                                                                    | 4.0   | 4.0   |      | 4.0   |     |       | 4.0   | 4.0   |      | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    | 38.0  | 38.0  |      | 36.0  |     |       | 25.0  | 25.0  |      | 34.0  | 34.0  |
| Pedestrian Calls (#/hr) |                                                                                    | 0     | 0     |      | 0     |     |       | 0     | 0     |      | 0     | 0     |
| Act Effect Green (s)    | 16.1                                                                               | 17.5  | 17.5  | 14.0 | 8.8   |     | 12.5  | 93.5  | 93.5  | 8.3  | 86.5  | 86.5  |
| Actuated g/C Ratio      | 0.11                                                                               | 0.12  | 0.12  | 0.09 | 0.06  |     | 0.08  | 0.62  | 0.62  | 0.06 | 0.58  | 0.58  |
| v/c Ratio               | 1.19                                                                               | 0.62  | 0.57  | 0.58 | 0.51  |     | 1.15  | 0.25  | 0.06  | 0.34 | 0.69  | 0.87  |
| Control Delay           | 164.3                                                                              | 20.5  | 13.5  | 70.3 | 52.3  |     | 163.5 | 17.6  | 1.5   | 81.4 | 21.9  | 15.3  |
| Queue Delay             | 0.0                                                                                | 0.0   | 0.0   | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Delay             | 164.3                                                                              | 20.5  | 13.5  | 70.3 | 52.3  |     | 163.5 | 17.6  | 1.5   | 81.4 | 21.9  | 15.3  |
| LOS                     | F                                                                                  | C     | B     | E    | D     |     | F     | B     | A     | F    | C     | B     |
| Approach Delay          |                                                                                    | 92.6  |       |      | 61.8  |     |       | 67.7  |       |      | 20.0  |       |
| Approach LOS            |                                                                                    | F     |       |      | E     |     |       | E     |       |      | C     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 19 (13%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.19

Intersection Signal Delay: 45.7

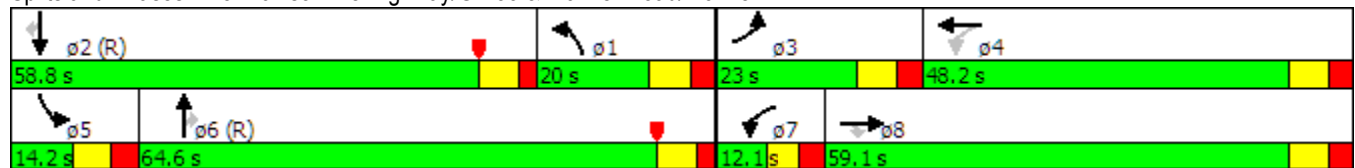
Intersection LOS: D

Intersection Capacity Utilization 87.5%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 8: Dawsonville Highway/GA 53 & McEver Road/McEver



## Lanier Tract DRI

## 9: Dawsonville Highway &amp; Greenhill Circle/Greenhill Circle

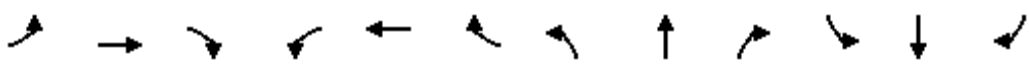
no build a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 74                                                                                | 1                                                                                 | 156                                                                               | 7                                                                                 | 1                                                                                 | 4                                                                                 | 149                                                                                 | 832                                                                                 | 11                                                                                  | 13                                                                                  | 1550                                                                                | 57                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 3%                                                                                |                                                                                   |                                                                                   | 7%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 190                                                                                 |                                                                                     | 190                                                                                 | 185                                                                                 |                                                                                     | 100                                                                                 |
| Storage Lanes              | 0                                                                                 |                                                                                   | 1                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              |                                                                                   | 0.953                                                                             |                                                                                   |                                                                                   | 0.957                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1784                                                                              | 1591                                                                              | 0                                                                                 | 1755                                                                              | 1558                                                                              | 1796                                                                                | 3522                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   | 0.721                                                                             |                                                                                   |                                                                                   | 0.751                                                                             |                                                                                   | 0.082                                                                               |                                                                                     |                                                                                     | 0.296                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1349                                                                              | 1591                                                                              | 0                                                                                 | 1377                                                                              | 1558                                                                              | 155                                                                                 | 3522                                                                                | 1607                                                                                | 562                                                                                 | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 143                                                                               |                                                                                   |                                                                                   | 102                                                                               |                                                                                     |                                                                                     | 57                                                                                  |                                                                                     |                                                                                     | 101                                                                                 |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 288                                                                               |                                                                                   |                                                                                   | 254                                                                               |                                                                                   |                                                                                     | 778                                                                                 |                                                                                     |                                                                                     | 921                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.9                                                                               |                                                                                   |                                                                                   | 6.9                                                                               |                                                                                   |                                                                                     | 11.8                                                                                |                                                                                     |                                                                                     | 14.0                                                                                |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.69                                                                              | 0.69                                                                              | 0.69                                                                              | 0.86                                                                                | 0.86                                                                                | 0.86                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 82                                                                                | 1                                                                                 | 173                                                                               | 10                                                                                | 1                                                                                 | 6                                                                                 | 173                                                                                 | 967                                                                                 | 13                                                                                  | 14                                                                                  | 1685                                                                                | 62                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 83                                                                                | 173                                                                               | 0                                                                                 | 11                                                                                | 6                                                                                 | 173                                                                                 | 967                                                                                 | 13                                                                                  | 14                                                                                  | 1685                                                                                | 62                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.02                                                                              | 1.02                                                                              | 1.02                                                                              | 1.05                                                                              | 1.05                                                                              | 1.05                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              | 23.0                                                                              | 39.9                                                                              | 39.9                                                                              | 39.9                                                                              | 11.0                                                                                | 28.0                                                                                | 28.0                                                                                | 10.0                                                                                | 36.0                                                                                | 36.0                                                                                |

# Lanier Tract DRI

## 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle

no build a.m.

|                         |  |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 39.9                                                                               | 39.9  | 39.9  | 39.9  | 39.9  | 39.9  | 22.0  | 100.1 | 100.1 | 10.0  | 88.1  | 88.1  |
| Total Split (%)         | 26.6%                                                                              | 26.6% | 26.6% | 26.6% | 26.6% | 26.6% | 14.7% | 66.7% | 66.7% | 6.7%  | 58.7% | 58.7% |
| Maximum Green (s)       | 34.0                                                                               | 34.0  | 34.0  | 34.0  | 34.0  | 34.0  | 16.0  | 94.1  | 94.1  | 5.0   | 82.1  | 82.1  |
| Yellow Time (s)         | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 4.4   | 4.4   | 3.5   | 4.4   | 4.4   |
| All-Red Time (s)        | 2.9                                                                                | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 3.0   | 1.6   | 1.6   | 1.5   | 1.6   | 1.6   |
| Lost Time Adjust (s)    |                                                                                    | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |                                                                                    | 5.9   | 5.9   |       | 5.9   | 5.9   | 6.0   | 6.0   | 6.0   | 5.0   | 6.0   | 6.0   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           |                                                                                    |       |       | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    |       |       | 30.0  | 30.0  | 30.0  |       | 18.0  | 18.0  |       | 26.0  | 26.0  |
| Pedestrian Calls (#/hr) |                                                                                    |       |       | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    |                                                                                    | 14.6  | 14.6  |       | 14.6  | 14.6  | 123.5 | 119.1 | 119.1 | 108.8 | 102.1 | 102.1 |
| Actuated g/C Ratio      |                                                                                    | 0.10  | 0.10  |       | 0.10  | 0.10  | 0.82  | 0.79  | 0.79  | 0.73  | 0.68  | 0.68  |
| v/c Ratio               |                                                                                    | 0.64  | 0.61  |       | 0.08  | 0.02  | 0.58  | 0.35  | 0.01  | 0.03  | 0.69  | 0.05  |
| Control Delay           |                                                                                    | 85.5  | 24.1  |       | 59.9  | 0.2   | 29.1  | 4.6   | 0.0   | 4.0   | 14.0  | 0.8   |
| Queue Delay             |                                                                                    | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.1   | 0.0   |
| Total Delay             |                                                                                    | 85.5  | 24.1  |       | 59.9  | 0.2   | 29.1  | 4.6   | 0.0   | 4.0   | 14.1  | 0.8   |
| LOS                     |                                                                                    | F     | C     |       | E     | A     | C     | A     | A     | A     | B     | A     |
| Approach Delay          |                                                                                    | 44.0  |       |       | 38.8  |       |       | 8.2   |       |       | 13.5  |       |
| Approach LOS            |                                                                                    | D     |       |       | D     |       |       | A     |       |       | B     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.69

Intersection Signal Delay: 14.2

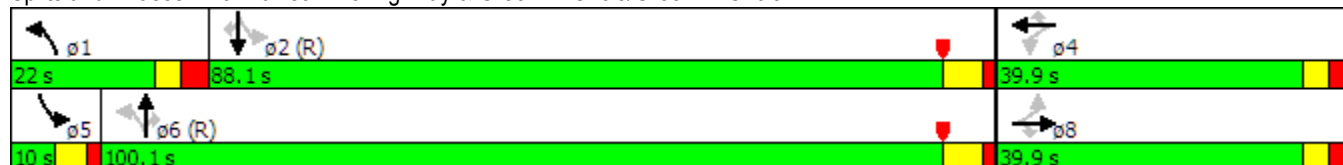
Intersection LOS: B

Intersection Capacity Utilization 76.8%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle



## Lanier Tract DRI

## 10: Dawsonville Highway &amp; Shallowford Rd/Best Buy

no build a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |                                                                                   |  |  |   |  |  |  |  |  |
| Volume (vph)               | 152                                                                               | 2                                                                                 | 9                                                                                 | 2                                                                                 | 4                                                                                 | 3                                                                                 | 11                                                                                  | 815                                                                                 | 14                                                                                  | 1                                                                                   | 1379                                                                                | 373                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | -1%                                                                               |                                                                                   |                                                                                   | 10%                                                                               |                                                                                   |                                                                                     | -4%                                                                                 |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 350                                                                               |                                                                                   | 350                                                                               | 0                                                                                 |                                                                                   | 0                                                                                 | 350                                                                                 |                                                                                     | 150                                                                                 | 265                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 100                                                                               |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             | 0.953                                                                             |                                                                                   |                                                                                   | 0.982                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1723                                                                              | 1729                                                                              | 1623                                                                              | 0                                                                                 | 1773                                                                              | 1534                                                                              | 1841                                                                                | 3646                                                                                | 1647                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             | 0.953                                                                             |                                                                                   |                                                                                   | 0.982                                                                             |                                                                                   | 0.125                                                                               |                                                                                     |                                                                                     | 0.292                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1723                                                                              | 1729                                                                              | 1623                                                                              | 0                                                                                 | 1773                                                                              | 1534                                                                              | 242                                                                                 | 3646                                                                                | 1647                                                                                | 558                                                                                 | 3592                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 113                                                                               |                                                                                   |                                                                                   | 119                                                                               |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     | 218                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 653                                                                               |                                                                                   |                                                                                   | 178                                                                               |                                                                                   |                                                                                     | 957                                                                                 |                                                                                     |                                                                                     | 778                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 9.9                                                                               |                                                                                   |                                                                                   | 4.9                                                                               |                                                                                   |                                                                                     | 14.5                                                                                |                                                                                     |                                                                                     | 11.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.84                                                                              | 0.84                                                                              | 0.84                                                                              | 0.56                                                                              | 0.56                                                                              | 0.56                                                                              | 0.83                                                                                | 0.83                                                                                | 0.83                                                                                | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 181                                                                               | 2                                                                                 | 11                                                                                | 4                                                                                 | 7                                                                                 | 5                                                                                 | 13                                                                                  | 982                                                                                 | 17                                                                                  | 1                                                                                   | 1483                                                                                | 401                                                                                 |
| Shared Lane Traffic (%)    | 49%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 92                                                                                | 91                                                                                | 11                                                                                | 0                                                                                 | 11                                                                                | 5                                                                                 | 13                                                                                  | 982                                                                                 | 17                                                                                  | 1                                                                                   | 1483                                                                                | 401                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 0.99                                                                              | 0.99                                                                              | 0.99                                                                              | 1.07                                                                              | 1.07                                                                              | 1.07                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Split                                                                             | NA                                                                                | Perm                                                                              | Split                                                                             | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | Perm                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 3                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 3                                                                                 | 3                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 36.7                                                                              | 36.7                                                                              | 36.7                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                                | 28.8                                                                                | 28.8                                                                                | 30.8                                                                                | 30.8                                                                                | 30.8                                                                                |

# Lanier Tract DRI

## 10: Dawsonville Highway & Shallowford Rd/Best Buy

no build a.m.

|                         |  |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 36.7                                                                               | 36.7  | 36.7  | 38.9  | 38.9  | 38.9  | 10.8  | 74.4  | 74.4  | 63.6  | 63.6  | 63.6  |
| Total Split (%)         | 24.5%                                                                              | 24.5% | 24.5% | 25.9% | 25.9% | 25.9% | 7.2%  | 49.6% | 49.6% | 42.4% | 42.4% | 42.4% |
| Maximum Green (s)       | 30.0                                                                               | 30.0  | 30.0  | 33.0  | 33.0  | 33.0  | 5.0   | 67.6  | 67.6  | 56.8  | 56.8  | 56.8  |
| Yellow Time (s)         | 4.5                                                                                | 4.5   | 4.5   | 3.0   | 3.0   | 3.0   | 3.0   | 4.9   | 4.9   | 4.9   | 4.9   | 4.9   |
| All-Red Time (s)        | 2.2                                                                                | 2.2   | 2.2   | 2.9   | 2.9   | 2.9   | 2.8   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.7                                                                                | 6.7   | 6.7   |       | 5.9   | 5.9   | 5.8   | 6.8   | 6.8   | 6.8   | 6.8   | 6.8   |
| Lead/Lag                | Lead                                                                               | Lead  | Lead  | Lag   | Lag   | Lag   | Lead  |       |       | Lag   | Lag   | Lag   |
| Lead-Lag Optimize?      | Yes                                                                                | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |       |       | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Min | C-Min | C-Min | C-Min | C-Min |
| Walk Time (s)           | 4.0                                                                                | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 26.0                                                                               | 26.0  | 26.0  | 29.0  | 29.0  | 29.0  |       | 18.0  | 18.0  | 20.0  | 20.0  | 20.0  |
| Pedestrian Calls (#/hr) | 0                                                                                  | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     | 0     | 0     | 0     |
| Act Effect Green (s)    | 13.4                                                                               | 13.4  | 13.4  |       | 6.5   | 6.5   | 118.7 | 117.7 | 117.7 | 113.0 | 113.0 | 113.0 |
| Actuated g/C Ratio      | 0.09                                                                               | 0.09  | 0.09  |       | 0.04  | 0.04  | 0.79  | 0.78  | 0.78  | 0.75  | 0.75  | 0.75  |
| v/c Ratio               | 0.60                                                                               | 0.59  | 0.04  |       | 0.14  | 0.03  | 0.05  | 0.34  | 0.01  | 0.00  | 0.55  | 0.31  |
| Control Delay           | 81.2                                                                               | 80.6  | 0.3   |       | 72.5  | 0.3   | 5.8   | 6.1   | 0.0   | 7.0   | 10.2  | 4.2   |
| Queue Delay             | 0.0                                                                                | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.3   | 0.0   |
| Total Delay             | 81.2                                                                               | 80.6  | 0.3   |       | 72.5  | 0.3   | 5.8   | 6.1   | 0.0   | 7.0   | 10.5  | 4.2   |
| LOS                     | F                                                                                  | F     | A     |       | E     | A     | A     | A     | A     | A     | B     | A     |
| Approach Delay          |                                                                                    | 76.3  |       |       | 49.9  |       |       | 6.0   |       |       | 9.1   |       |
| Approach LOS            |                                                                                    | E     |       |       | D     |       |       | A     |       |       | A     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 45 (30%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 12.5

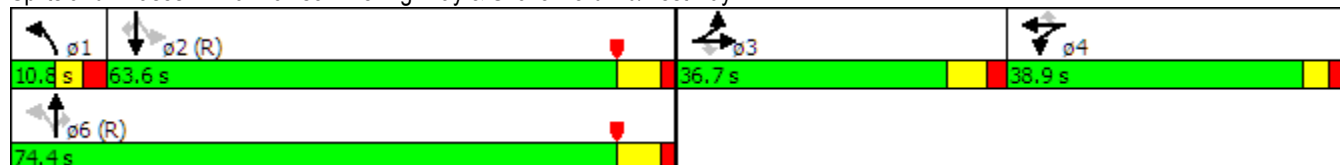
Intersection LOS: B

Intersection Capacity Utilization 62.6%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 10: Dawsonville Highway & Shallowford Rd/Best Buy



Lanier Tract DRI  
1: Sportsman Club Road & Strickland Drive

no build p.m.

| Intersection             |        |       |        |      |        |           |
|--------------------------|--------|-------|--------|------|--------|-----------|
| Int Delay, s/veh         | 1.7    |       |        |      |        |           |
|                          |        |       |        |      |        |           |
| Movement                 | WBL    | WBR   |        | NBT  | NBR    | SBL SBT   |
| Vol, veh/h               | 8      | 0     |        | 32   | 10     | 0 25      |
| Conflicting Peds, #/hr   | 0      | 0     |        | 0    | 0      | 0 0       |
| Sign Control             | Stop   | Stop  |        | Free | Free   | Free Free |
| RT Channelized           | -      | None  |        | -    | None   | - None    |
| Storage Length           | 0      | -     |        | -    | -      | - -       |
| Veh in Median Storage, # | 0      | -     |        | 0    | -      | - 0       |
| Grade, %                 | 0      | -     |        | 0    | -      | - 0       |
| Peak Hour Factor         | 44     | 44    |        | 86   | 86     | 82 82     |
| Heavy Vehicles, %        | 2      | 2     |        | 2    | 2      | 2 2       |
| Mvmt Flow                | 18     | 0     |        | 37   | 12     | 0 30      |
|                          |        |       |        |      |        |           |
| Major/Minor              | Minor1 |       | Major1 |      | Major2 |           |
| Conflicting Flow All     | 73     | 43    |        | 0    | 0      | 49 0      |
| Stage 1                  | 43     | -     |        | -    | -      | - -       |
| Stage 2                  | 30     | -     |        | -    | -      | - -       |
| Critical Hdwy            | 6.42   | 6.22  |        | -    | -      | 4.12 -    |
| Critical Hdwy Stg 1      | 5.42   | -     |        | -    | -      | - -       |
| Critical Hdwy Stg 2      | 5.42   | -     |        | -    | -      | - -       |
| Follow-up Hdwy           | 3.518  | 3.318 |        | -    | -      | 2.218 -   |
| Pot Cap-1 Maneuver       | 931    | 1027  |        | -    | -      | 1558 -    |
| Stage 1                  | 979    | -     |        | -    | -      | - -       |
| Stage 2                  | 993    | -     |        | -    | -      | - -       |
| Platoon blocked, %       |        |       |        | -    | -      | -         |
| Mov Cap-1 Maneuver       | 931    | 1027  |        | -    | -      | 1558 -    |
| Mov Cap-2 Maneuver       | 931    | -     |        | -    | -      | - -       |
| Stage 1                  | 979    | -     |        | -    | -      | - -       |
| Stage 2                  | 993    | -     |        | -    | -      | - -       |
|                          |        |       |        |      |        |           |
| Approach                 | WB     |       | NB     |      | SB     |           |
| HCM Control Delay, s     | 8.9    |       | 0      |      | 0      |           |
| HCM LOS                  | A      |       |        |      |        |           |
|                          |        |       |        |      |        |           |
| Minor Lane/Major Mvmt    | NBT    | NBR   | WBLn1  | SBL  | SBT    |           |
| Capacity (veh/h)         | -      | -     | 931    | 1558 | -      |           |
| HCM Lane V/C Ratio       | -      | -     | 0.02   | -    | -      |           |
| HCM Control Delay (s)    | -      | -     | 8.9    | 0    | -      |           |
| HCM Lane LOS             | -      | -     | A      | A    | -      |           |
| HCM 95th %tile Q(veh)    | -      | -     | 0.1    | 0    | -      |           |

Lanier Tract DRI  
2: GA 53 & Sportsman Club Road

no build p.m.

| Intersection                                                                                                         |        |      |      |        |       |      |        |           |      |           |      |      |
|----------------------------------------------------------------------------------------------------------------------|--------|------|------|--------|-------|------|--------|-----------|------|-----------|------|------|
| Int Delay, s/veh                                                                                                     | 34.3   |      |      |        |       |      |        |           |      |           |      |      |
|                                                                                                                      |        |      |      |        |       |      |        |           |      |           |      |      |
| Movement                                                                                                             | EBL    | EBT  | EBR  | WBL    | WBT   | WBR  | NBL    | NBT       | NBR  | SBL       | SBT  | SBR  |
| Vol, veh/h                                                                                                           | 17     | 1147 | 0    | 2      | 1845  | 21   | 0      | 0         | 0    | 31        | 0    | 10   |
| Conflicting Peds, #/hr                                                                                               | 0      | 0    | 0    | 0      | 0     | 0    | 0      | 0         | 0    | 0         | 0    | 0    |
| Sign Control                                                                                                         | Free   | Free | Free | Free   | Free  | Free | Stop   | Stop      | Stop | Stop      | Stop | Stop |
| RT Channelized                                                                                                       | -      | -    | None | -      | -     | None | -      | -         | None | -         | -    | None |
| Storage Length                                                                                                       | 0      | -    | -    | 0      | -     | -    | -      | -         | -    | -         | -    | -    |
| Veh in Median Storage, #                                                                                             | -      | 0    | -    | -      | 0     | -    | -      | 0         | -    | -         | 0    | -    |
| Grade, %                                                                                                             | -      | 0    | -    | -      | 0     | -    | -      | 0         | -    | -         | 0    | -    |
| Peak Hour Factor                                                                                                     | 95     | 95   | 95   | 96     | 96    | 96   | 92     | 92        | 92   | 66        | 66   | 66   |
| Heavy Vehicles, %                                                                                                    | 2      | 2    | 2    | 2      | 2     | 2    | 2      | 2         | 2    | 2         | 2    | 2    |
| Mvmt Flow                                                                                                            | 18     | 1207 | 0    | 2      | 1922  | 22   | 0      | 0         | 0    | 47        | 0    | 15   |
|                                                                                                                      |        |      |      |        |       |      |        |           |      |           |      |      |
| Major/Minor                                                                                                          | Major1 |      |      | Major2 |       |      | Minor1 |           |      | Minor2    |      |      |
| Conflicting Flow All                                                                                                 | 1944   | 0    | 0    | 1207   | 0     | 0    | 2208   | 3191      | 604  | 2576      | 3180 | 972  |
| Stage 1                                                                                                              | -      | -    | -    | -      | -     | -    | 1243   | 1243      | -    | 1937      | 1937 | -    |
| Stage 2                                                                                                              | -      | -    | -    | -      | -     | -    | 965    | 1948      | -    | 639       | 1243 | -    |
| Critical Hdwy                                                                                                        | 4.14   | -    | -    | 4.14   | -     | -    | 7.54   | 6.54      | 6.94 | 7.54      | 6.54 | 6.94 |
| Critical Hdwy Stg 1                                                                                                  | -      | -    | -    | -      | -     | -    | 6.54   | 5.54      | -    | 6.54      | 5.54 | -    |
| Critical Hdwy Stg 2                                                                                                  | -      | -    | -    | -      | -     | -    | 6.54   | 5.54      | -    | 6.54      | 5.54 | -    |
| Follow-up Hdwy                                                                                                       | 2.22   | -    | -    | 2.22   | -     | -    | 3.52   | 4.02      | 3.32 | 3.52      | 4.02 | 3.32 |
| Pot Cap-1 Maneuver                                                                                                   | 298    | -    | -    | 574    | -     | -    | 24     | 10        | 441  | ~ 13      | 10   | 252  |
| Stage 1                                                                                                              | -      | -    | -    | -      | -     | -    | 185    | 245       | -    | 68        | 111  | -    |
| Stage 2                                                                                                              | -      | -    | -    | -      | -     | -    | 274    | 110       | -    | 431       | 245  | -    |
| Platoon blocked, %                                                                                                   |        | -    | -    |        | -     | -    |        |           |      |           |      |      |
| Mov Cap-1 Maneuver                                                                                                   | 298    | -    | -    | 574    | -     | -    | 21     | 9         | 441  | ~ 12      | 9    | 252  |
| Mov Cap-2 Maneuver                                                                                                   | -      | -    | -    | -      | -     | -    | 21     | 9         | -    | ~ 12      | 9    | -    |
| Stage 1                                                                                                              | -      | -    | -    | -      | -     | -    | 174    | 230       | -    | 64        | 111  | -    |
| Stage 2                                                                                                              | -      | -    | -    | -      | -     | -    | 257    | 110       | -    | 405       | 230  | -    |
|                                                                                                                      |        |      |      |        |       |      |        |           |      |           |      |      |
| Approach                                                                                                             | EB     |      |      | WB     |       |      | NB     |           |      | SB        |      |      |
| HCM Control Delay, s                                                                                                 | 0.3    |      |      | 0      |       |      | 0      |           |      | \$ 1780.7 |      |      |
| HCM LOS                                                                                                              |        |      |      |        |       |      | A      |           |      | F         |      |      |
|                                                                                                                      |        |      |      |        |       |      |        |           |      |           |      |      |
| Minor Lane/Major Mvmt                                                                                                | NBLn1  | EBL  | EBT  | EBR    | WBL   | WBT  | WBR    | SBLn1     |      |           |      |      |
| Capacity (veh/h)                                                                                                     | -      | 298  | -    | -      | 574   | -    | -      | 16        |      |           |      |      |
| HCM Lane V/C Ratio                                                                                                   | -      | 0.06 | -    | -      | 0.004 | -    | -      | 3.883     |      |           |      |      |
| HCM Control Delay (s)                                                                                                | 0      | 17.9 | -    | -      | 11.3  | -    |        | \$ 1780.7 |      |           |      |      |
| HCM Lane LOS                                                                                                         | A      | C    | -    | -      | B     | -    | -      | F         |      |           |      |      |
| HCM 95th %tile Q(veh)                                                                                                | -      | 0.2  | -    | -      | 0     | -    | -      | 8.5       |      |           |      |      |
| Notes                                                                                                                |        |      |      |        |       |      |        |           |      |           |      |      |
| ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |        |      |      |        |       |      |        |           |      |           |      |      |

| Intersection             |        |        |       |        |      |      |
|--------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh         | 1.5    |        |       |        |      |      |
| Movement                 | EBL    | EBR    | NBL   | NBT    | SBT  | SBR  |
| Vol, veh/h               | 11     | 52     | 68    | 1822   | 1217 | 15   |
| Conflicting Peds, #/hr   | 0      | 0      | 0     | 0      | 0    | 0    |
| Sign Control             | Stop   | Stop   | Free  | Free   | Free | Free |
| RT Channelized           | -      | None   | -     | None   | -    | None |
| Storage Length           | 0      | 0      | 0     | -      | -    | 0    |
| Veh in Median Storage, # | 0      | -      | -     | 0      | 0    | -    |
| Grade, %                 | 0      | -      | -     | 0      | 0    | -    |
| Peak Hour Factor         | 76     | 76     | 95    | 95     | 100  | 100  |
| Heavy Vehicles, %        | 2      | 2      | 2     | 2      | 2    | 2    |
| Mvmt Flow                | 14     | 68     | 72    | 1918   | 1217 | 15   |
| Major/Minor              | Minor2 | Major1 |       | Major2 |      |      |
| Conflicting Flow All     | 2319   | 609    | 1217  | 0      | -    | 0    |
| Stage 1                  | 1217   | -      | -     | -      | -    | -    |
| Stage 2                  | 1102   | -      | -     | -      | -    | -    |
| Critical Hdwy            | 6.84   | 6.94   | 4.14  | -      | -    | -    |
| Critical Hdwy Stg 1      | 5.84   | -      | -     | -      | -    | -    |
| Critical Hdwy Stg 2      | 5.84   | -      | -     | -      | -    | -    |
| Follow-up Hdwy           | 3.52   | 3.32   | 2.22  | -      | -    | -    |
| Pot Cap-1 Maneuver       | 32     | 438    | 569   | -      | -    | -    |
| Stage 1                  | 243    | -      | -     | -      | -    | -    |
| Stage 2                  | 280    | -      | -     | -      | -    | -    |
| Platoon blocked, %       |        |        |       | -      | -    | -    |
| Mov Cap-1 Maneuver       | 28     | 438    | 569   | -      | -    | -    |
| Mov Cap-2 Maneuver       | 28     | -      | -     | -      | -    | -    |
| Stage 1                  | 243    | -      | -     | -      | -    | -    |
| Stage 2                  | 245    | -      | -     | -      | -    | -    |
| Approach                 | EB     | NB     |       | SB     |      |      |
| HCM Control Delay, s     | 52.1   | 0.4    |       | 0      |      |      |
| HCM LOS                  | F      |        |       |        |      |      |
| Minor Lane/Major Mvmt    | NBL    | NBT    | EBLn1 | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)         | 569    | -      | 28    | 438    | -    | -    |
| HCM Lane V/C Ratio       | 0.126  | -      | 0.517 | 0.156  | -    | -    |
| HCM Control Delay (s)    | 12.2   | -      | 229.1 | 14.7   | -    | -    |
| HCM Lane LOS             | B      | -      | F     | B      | -    | -    |
| HCM 95th %tile Q(veh)    | 0.4    | -      | 1.6   | 0.5    | -    | -    |



Lanier Tract DRI  
4: Canterbury Road & GA 53

no build p.m.

| Intersection             |        |        |          |        |      |      |
|--------------------------|--------|--------|----------|--------|------|------|
| Int Delay, s/veh         | 1.7    |        |          |        |      |      |
| Movement                 | EBL    | EBR    | NBL      | NBT    | SBT  | SBR  |
| Vol, veh/h               | 8      | 31     | 123      | 1857   | 1223 | 15   |
| Conflicting Peds, #/hr   | 0      | 0      | 0        | 0      | 0    | 0    |
| Sign Control             | Stop   | Stop   | Free     | Free   | Free | Free |
| RT Channelized           | -      | None   | -        | None   | -    | None |
| Storage Length           | 0      | 0      | 0        | -      | -    | 0    |
| Veh in Median Storage, # | 0      | -      | -        | 0      | 0    | -    |
| Grade, %                 | 0      | -      | -        | 0      | 0    | -    |
| Peak Hour Factor         | 80     | 80     | 96       | 96     | 96   | 96   |
| Heavy Vehicles, %        | 2      | 2      | 2        | 2      | 2    | 2    |
| Mvmt Flow                | 10     | 39     | 128      | 1934   | 1274 | 16   |
| Major/Minor              | Minor2 | Major1 |          | Major2 |      |      |
| Conflicting Flow All     | 2497   | 637    | 1274     | 0      | -    | 0    |
| Stage 1                  | 1274   | -      | -        | -      | -    | -    |
| Stage 2                  | 1223   | -      | -        | -      | -    | -    |
| Critical Hdwy            | 6.84   | 6.94   | 4.14     | -      | -    | -    |
| Critical Hdwy Stg 1      | 5.84   | -      | -        | -      | -    | -    |
| Critical Hdwy Stg 2      | 5.84   | -      | -        | -      | -    | -    |
| Follow-up Hdwy           | 3.52   | 3.32   | 2.22     | -      | -    | -    |
| Pot Cap-1 Maneuver       | 24     | 420    | 541      | -      | -    | -    |
| Stage 1                  | 226    | -      | -        | -      | -    | -    |
| Stage 2                  | 241    | -      | -        | -      | -    | -    |
| Platoon blocked, %       |        |        |          | -      | -    | -    |
| Mov Cap-1 Maneuver       | 18     | 420    | 541      | -      | -    | -    |
| Mov Cap-2 Maneuver       | 18     | -      | -        | -      | -    | -    |
| Stage 1                  | 226    | -      | -        | -      | -    | -    |
| Stage 2                  | 184    | -      | -        | -      | -    | -    |
| Approach                 | EB     | NB     |          | SB     |      |      |
| HCM Control Delay, s     | 83.2   | 0.9    |          | 0      |      |      |
| HCM LOS                  | F      |        |          |        |      |      |
| Minor Lane/Major Mvmt    | NBL    | NBT    | EBLn1    | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)         | 541    | -      | 18       | 420    | -    | -    |
| HCM Lane V/C Ratio       | 0.237  | -      | 0.556    | 0.092  | -    | -    |
| HCM Control Delay (s)    | 13.7   | -      | \$ 349.9 | 14.4   | -    | -    |
| HCM Lane LOS             | B      | -      | F        | B      | -    | -    |
| HCM 95th %tile Q(veh)    | 0.9    | -      | 1.5      | 0.3    | -    | -    |

Lanier Tract DRI  
7: GA 53 & Beechwood Boulevard

no build p.m.

Intersection

Int Delay, s/veh 0.9

| Movement                 | EBL  | EBR   | NBL  | NBT   | SBT  | SBR  |
|--------------------------|------|-------|------|-------|------|------|
| Vol, veh/h               | 1    | 52    | 95   | 2206  | 1532 | 10   |
| Conflicting Peds, #/hr   | 0    | 0     | 0    | 0     | 0    | 0    |
| Sign Control             | Stop | Stop  | Free | Free  | Free | Free |
| RT Channelized           | -    | Yield | -    | Yield | -    | None |
| Storage Length           | 0    | 0     | 200  | -     | -    | 360  |
| Veh in Median Storage, # | 0    | -     | -    | 0     | 0    | -    |
| Grade, %                 | 0    | -     | -    | 1     | 0    | -    |
| Peak Hour Factor         | 71   | 71    | 99   | 99    | 98   | 98   |
| Heavy Vehicles, %        | 0    | 0     | 0    | 0     | 1    | 0    |
| Mvmt Flow                | 1    | 73    | 96   | 2228  | 1563 | 10   |

| Major/Minor          | Minor2 |     | Major1 |   | Major2 |   |
|----------------------|--------|-----|--------|---|--------|---|
| Conflicting Flow All | 2869   | 783 | 1563   | 0 | -      | 0 |
| Stage 1              | 1563   | -   | -      | - | -      | - |
| Stage 2              | 1306   | -   | -      | - | -      | - |
| Critical Hdwy        | 6.8    | 6.9 | 4.1    | - | -      | - |
| Critical Hdwy Stg 1  | 5.8    | -   | -      | - | -      | - |
| Critical Hdwy Stg 2  | 5.8    | -   | -      | - | -      | - |
| Follow-up Hdwy       | 3.5    | 3.3 | 2.2    | - | -      | - |
| Pot Cap-1 Maneuver   | 14     | 341 | 428    | - | -      | - |
| Stage 1              | 161    | -   | -      | - | -      | - |
| Stage 2              | 221    | -   | -      | - | -      | - |
| Platoon blocked, %   |        |     |        | - | -      | - |
| Mov Cap-1 Maneuver   | 11     | 341 | 428    | - | -      | - |
| Mov Cap-2 Maneuver   | 11     | -   | -      | - | -      | - |
| Stage 1              | 161    | -   | -      | - | -      | - |
| Stage 2              | 171    | -   | -      | - | -      | - |

| Approach             | EB   | NB  | SB |
|----------------------|------|-----|----|
| HCM Control Delay, s | 25.1 | 0.7 | 0  |
| HCM LOS              | D    |     |    |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | EBLn2 | SBT | SBR |
|-----------------------|-------|-----|-------|-------|-----|-----|
| Capacity (veh/h)      | 428   | -   | 11    | 341   | -   | -   |
| HCM Lane V/C Ratio    | 0.224 | -   | 0.128 | 0.215 | -   | -   |
| HCM Control Delay (s) | 15.8  | -   | 375.6 | 18.4  | -   | -   |
| HCM Lane LOS          | C     | -   | F     | C     | -   | -   |
| HCM 95th %tile Q(veh) | 0.8   | -   | 0.3   | 0.8   | -   | -   |

Lanier Tract DRI

5: GA 53 & Lanier Valley Dr/Ahaluna Dr

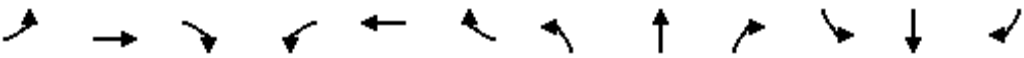
no build p.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Volume (vph)               | 23                                                                                | 1                                                                                 | 106                                                                               | 41                                                                                | 8                                                                                 | 56                                                                                | 198                                                                                 | 1918                                                                                | 42                                                                                  | 22                                                                                  | 1326                                                                                | 3                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 2%                                                                                |                                                                                   |                                                                                   | -4%                                                                               |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 100                                                                                 |                                                                                     | 0                                                                                   | 140                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.890                                                                             |                                                                                   |                                                                                   | 0.928                                                                             |                                                                                   |                                                                                     | 0.997                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   | 0.991                                                                             |                                                                                   |                                                                                   | 0.981                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1659                                                                              | 0                                                                                 | 0                                                                                 | 1764                                                                              | 0                                                                                 | 1796                                                                                | 3581                                                                                | 0                                                                                   | 1814                                                                                | 3592                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.860                                                                             |                                                                                   |                                                                                   | 0.589                                                                             |                                                                                   | 0.143                                                                               |                                                                                     |                                                                                     | 0.080                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1440                                                                              | 0                                                                                 | 0                                                                                 | 1059                                                                              | 0                                                                                 | 270                                                                                 | 3581                                                                                | 0                                                                                   | 153                                                                                 | 3592                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 119                                                                               |                                                                                   |                                                                                   | 31                                                                                |                                                                                   |                                                                                     | 4                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 340                                                                               |                                                                                   |                                                                                   | 322                                                                               |                                                                                   |                                                                                     | 1002                                                                                |                                                                                     |                                                                                     | 1457                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.7                                                                               |                                                                                   |                                                                                   | 7.3                                                                               |                                                                                   |                                                                                     | 15.2                                                                                |                                                                                     |                                                                                     | 22.1                                                                                |                                                                                     |
| Peak Hour Factor           | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.85                                                                              | 0.85                                                                              | 0.85                                                                              | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 26                                                                                | 1                                                                                 | 119                                                                               | 48                                                                                | 9                                                                                 | 66                                                                                | 206                                                                                 | 1998                                                                                | 44                                                                                  | 23                                                                                  | 1381                                                                                | 3                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 146                                                                               | 0                                                                                 | 0                                                                                 | 123                                                                               | 0                                                                                 | 206                                                                                 | 2042                                                                                | 0                                                                                   | 23                                                                                  | 1384                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 |                                                                                     | 0                                                                                   | 336                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   |                                                                                     | 0                                                                                   | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 8                                                                                 | 8                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 10.6                                                                                | 23.0                                                                                |                                                                                     | 23.0                                                                                | 23.0                                                                                |                                                                                     |

# Lanier Tract DRI

## 5: GA 53 & Lanier Valley Dr/Ahaluna Dr

no build p.m.

|                       |  |       |     |       |       |     |       |       |     |       |       |     |
|-----------------------|------------------------------------------------------------------------------------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Lane Group            | EBL                                                                                | EBT   | EBR | WBL   | WBT   | WBR | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
| Total Split (s)       | 33.0                                                                               | 33.0  |     | 33.0  | 33.0  |     | 28.0  | 127.0 |     | 99.0  | 99.0  |     |
| Total Split (%)       | 20.6%                                                                              | 20.6% |     | 20.6% | 20.6% |     | 17.5% | 79.4% |     | 61.9% | 61.9% |     |
| Maximum Green (s)     | 26.4                                                                               | 26.4  |     | 26.4  | 26.4  |     | 22.4  | 120.9 |     | 92.9  | 92.9  |     |
| Yellow Time (s)       | 4.0                                                                                | 4.0   |     | 4.0   | 4.0   |     | 3.0   | 4.5   |     | 4.5   | 4.5   |     |
| All-Red Time (s)      | 2.6                                                                                | 2.6   |     | 2.6   | 2.6   |     | 2.6   | 1.6   |     | 1.6   | 1.6   |     |
| Lost Time Adjust (s)  |                                                                                    | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Lost Time (s)   |                                                                                    | 6.6   |     |       | 6.6   |     | 5.6   | 6.1   |     | 6.1   | 6.1   |     |
| Lead/Lag              |                                                                                    |       |     |       |       |     | Lead  |       |     | Lag   | Lag   |     |
| Lead-Lag Optimize?    |                                                                                    |       |     |       |       |     | Yes   |       |     | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0                                                                                | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode           | None                                                                               | None  |     | None  | None  |     | None  | C-Max |     | C-Max | C-Max |     |
| Act Effect Green (s)  |                                                                                    | 17.5  |     |       | 17.5  |     | 130.3 | 129.8 |     | 112.6 | 112.6 |     |
| Actuated g/C Ratio    |                                                                                    | 0.11  |     |       | 0.11  |     | 0.81  | 0.81  |     | 0.70  | 0.70  |     |
| v/c Ratio             |                                                                                    | 0.56  |     |       | 0.86  |     | 0.62  | 0.70  |     | 0.21  | 0.55  |     |
| Control Delay         |                                                                                    | 23.8  |     |       | 96.6  |     | 18.7  | 10.7  |     | 18.1  | 13.9  |     |
| Queue Delay           |                                                                                    | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay           |                                                                                    | 23.8  |     |       | 96.6  |     | 18.7  | 10.7  |     | 18.1  | 13.9  |     |
| LOS                   |                                                                                    | C     |     |       | F     |     | B     | B     |     | B     | B     |     |
| Approach Delay        |                                                                                    | 23.8  |     |       | 96.6  |     |       | 11.5  |     |       | 14.0  |     |
| Approach LOS          |                                                                                    | C     |     |       | F     |     |       | B     |     |       | B     |     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 129 (81%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 15.5

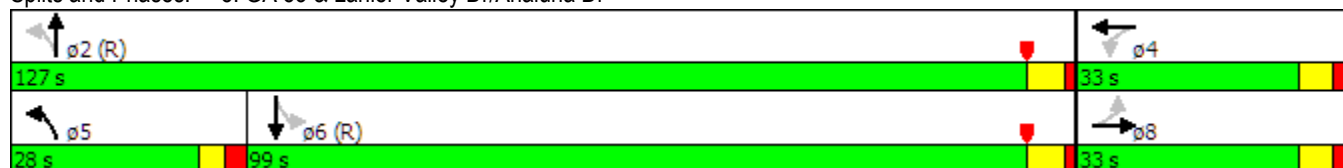
Intersection LOS: B

Intersection Capacity Utilization 86.1%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 5: GA 53 & Lanier Valley Dr/Ahaluna Dr



## Lanier Tract DRI

## 6: 53-Dawsonville Hwy &amp; Academy Sports

no build p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |  |    |  |  |  |  |  |
| Volume (vph)               | 14                                                                                | 3                                                                                 | 66                                                                                | 130                                                                               | 8                                                                                 | 46                                                                                | 96                                                                                  | 1947                                                                                | 152                                                                                 | 21                                                                                  | 1324                                                                                | 30                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 4%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 70                                                                                | 200                                                                                 |                                                                                     | 170                                                                                 | 190                                                                                 |                                                                                     | 360                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1805                                                                              | 1900                                                                              | 1615                                                                              | 1769                                                                              | 1862                                                                              | 1583                                                                              | 1796                                                                                | 3592                                                                                | 1607                                                                                | 1805                                                                                | 3574                                                                                | 1615                                                                                |
| Flt Permitted              | 0.751                                                                             |                                                                                   |                                                                                   | 0.756                                                                             |                                                                                   |                                                                                   | 0.144                                                                               |                                                                                     |                                                                                     | 0.054                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1427                                                                              | 1900                                                                              | 1615                                                                              | 1408                                                                              | 1862                                                                              | 1583                                                                              | 272                                                                                 | 3592                                                                                | 1607                                                                                | 103                                                                                 | 3574                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 69                                                                                |                                                                                   |                                                                                   | 63                                                                                |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     | 64                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 262                                                                               |                                                                                   |                                                                                   | 246                                                                               |                                                                                   |                                                                                     | 1836                                                                                |                                                                                     |                                                                                     | 685                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.1                                                                               |                                                                                   |                                                                                   | 6.7                                                                               |                                                                                   |                                                                                     | 27.8                                                                                |                                                                                     |                                                                                     | 10.4                                                                                |                                                                                     |
| Peak Hour Factor           | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.80                                                                              | 0.80                                                                              | 0.80                                                                              | 0.98                                                                                | 0.98                                                                                | 0.98                                                                                | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 15                                                                                | 3                                                                                 | 69                                                                                | 162                                                                               | 10                                                                                | 58                                                                                | 98                                                                                  | 1987                                                                                | 155                                                                                 | 22                                                                                  | 1365                                                                                | 31                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 15                                                                                | 3                                                                                 | 69                                                                                | 162                                                                               | 10                                                                                | 58                                                                                | 98                                                                                  | 1987                                                                                | 155                                                                                 | 22                                                                                  | 1365                                                                                | 31                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 2                                                                                   |                                                                                     | 2                                                                                   | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 42.0                                                                              | 42.0                                                                              | 42.0                                                                              | 42.4                                                                              | 42.4                                                                              | 42.4                                                                              | 11.4                                                                                | 30.3                                                                                | 30.3                                                                                | 11.0                                                                                | 29.3                                                                                | 29.3                                                                                |

Synchro 8 Report

Marc R Acampora, PE, LLC

# Lanier Tract DRI

## 6: 53-Dawsonville Hwy & Academy Sports

no build p.m.

| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Total Split (s)         | 42.4  | 42.4  | 42.4  | 42.4  | 42.4  | 42.4  | 15.6  | 106.6 | 106.6 | 11.0  | 102.0 | 102.0 |
| Total Split (%)         | 26.5% | 26.5% | 26.5% | 26.5% | 26.5% | 26.5% | 9.8%  | 66.6% | 66.6% | 6.9%  | 63.8% | 63.8% |
| Maximum Green (s)       | 36.0  | 36.0  | 36.0  | 36.0  | 36.0  | 36.0  | 9.2   | 100.4 | 100.4 | 5.0   | 95.8  | 95.8  |
| Yellow Time (s)         | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 4.3   | 4.3   | 3.0   | 4.3   | 4.3   |
| All-Red Time (s)        | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 1.9   | 1.9   | 3.0   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.2   | 6.2   | 6.0   | 6.2   | 6.2   |
| Lead/Lag                |       |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None  | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 23.0  | 23.0  | 23.0  | 32.0  | 32.0  | 32.0  |       | 20.0  | 20.0  |       | 19.0  | 19.0  |
| Pedestrian Calls (#/hr) | 0     | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    | 23.7  | 23.7  | 23.7  | 23.7  | 23.7  | 23.7  | 121.3 | 116.4 | 116.4 | 115.8 | 109.6 | 109.6 |
| Actuated g/C Ratio      | 0.15  | 0.15  | 0.15  | 0.15  | 0.15  | 0.15  | 0.76  | 0.73  | 0.73  | 0.72  | 0.68  | 0.68  |
| v/c Ratio               | 0.07  | 0.01  | 0.23  | 0.78  | 0.04  | 0.20  | 0.35  | 0.76  | 0.13  | 0.16  | 0.56  | 0.03  |
| Control Delay           | 55.8  | 53.3  | 13.0  | 89.1  | 54.6  | 11.7  | 9.3   | 15.7  | 7.2   | 7.5   | 10.9  | 0.0   |
| Queue Delay             | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.1   | 0.0   |
| Total Delay             | 55.8  | 53.3  | 13.0  | 89.1  | 54.6  | 11.7  | 9.3   | 15.7  | 7.2   | 7.5   | 11.0  | 0.0   |
| LOS                     | E     | D     | B     | F     | D     | B     | A     | B     | A     | A     | B     | A     |
| Approach Delay          |       | 21.8  |       |       | 68.1  |       |       | 14.8  |       |       | 10.7  |       |
| Approach LOS            |       | C     |       |       | E     |       |       | B     |       |       | B     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 120 (75%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 135

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 16.6

Intersection LOS: B

Intersection Capacity Utilization 87.4%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 6: 53-Dawsonville Hwy & Academy Sports

|        |         |  |  |  |  |  |  |  |        |  |  |
|--------|---------|--|--|--|--|--|--|--|--------|--|--|
|        |         |  |  |  |  |  |  |  |        |  |  |
| 11 s   | 106.6 s |  |  |  |  |  |  |  | 42.4 s |  |  |
| 15.6 s | 102 s   |  |  |  |  |  |  |  | 42.4 s |  |  |

## Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 &amp; McEver Road/McEver

no build p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |                                                                                   |   |  |  |  |  |  |
| Volume (vph)               | 933                                                                               | 235                                                                               | 426                                                                               | 96                                                                                | 100                                                                               | 89                                                                                | 478                                                                                 | 1504                                                                                | 51                                                                                  | 68                                                                                  | 1136                                                                                | 531                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 1%                                                                                |                                                                                   |                                                                                   | 5%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 180                                                                               |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 310                                                                                 |                                                                                     | 185                                                                                 | 255                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 50                                                                                |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.951                                                                             | 0.850                                                                             |                                                                                   | 0.929                                                                             |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 3484                                                                              | 1708                                                                              | 1527                                                                              | 1760                                                                              | 1721                                                                              | 0                                                                                 | 3484                                                                                | 3592                                                                                | 1607                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   | 0.465                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 3484                                                                              | 1708                                                                              | 1527                                                                              | 861                                                                               | 1721                                                                              | 0                                                                                 | 3484                                                                                | 3592                                                                                | 1607                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 18                                                                                | 326                                                                               |                                                                                   | 27                                                                                |                                                                                   |                                                                                     |                                                                                     | 172                                                                                 |                                                                                     |                                                                                     | 312                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 580                                                                               |                                                                                   |                                                                                   | 331                                                                               |                                                                                   |                                                                                     | 921                                                                                 |                                                                                     |                                                                                     | 1504                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 8.8                                                                               |                                                                                   |                                                                                   | 9.0                                                                               |                                                                                   |                                                                                     | 14.0                                                                                |                                                                                     |                                                                                     | 22.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.86                                                                              | 0.86                                                                              | 0.86                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 982                                                                               | 247                                                                               | 448                                                                               | 112                                                                               | 116                                                                               | 103                                                                               | 493                                                                                 | 1551                                                                                | 53                                                                                  | 75                                                                                  | 1248                                                                                | 584                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   | 27%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 982                                                                               | 368                                                                               | 327                                                                               | 112                                                                               | 219                                                                               | 0                                                                                 | 493                                                                                 | 1551                                                                                | 53                                                                                  | 75                                                                                  | 1248                                                                                | 584                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 24                                                                                |                                                                                   |                                                                                   | 24                                                                                |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                             | NA                                                                                |                                                                                   | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 8                                                                                 |                                                                                   | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 8                                                                                 | 8                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 13.2                                                                              | 50.2                                                                              | 50.2                                                                              | 11.6                                                                              | 48.2                                                                              |                                                                                   | 13.4                                                                                | 35.6                                                                                | 35.6                                                                                | 12.9                                                                                | 44.6                                                                                | 44.6                                                                                |

# Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 & McEver Road/McEver

no build p.m.

|                         |  |       |       |      |       |     |       |       |       |      |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|------|-------|-----|-------|-------|-------|------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL  | WBT   | WBR | NBL   | NBT   | NBR   | SBL  | SBT   | SBR   |
| Total Split (s)         | 35.0                                                                               | 69.5  | 69.5  | 13.7 | 48.2  |     | 23.0  | 63.8  | 63.8  | 13.0 | 53.8  | 53.8  |
| Total Split (%)         | 21.9%                                                                              | 43.4% | 43.4% | 8.6% | 30.1% |     | 14.4% | 39.9% | 39.9% | 8.1% | 33.6% | 33.6% |
| Maximum Green (s)       | 27.7                                                                               | 62.2  | 62.2  | 7.2  | 40.9  |     | 15.5  | 57.2  | 57.2  | 5.8  | 47.2  | 47.2  |
| Yellow Time (s)         | 4.3                                                                                | 4.3   | 4.3   | 3.5  | 4.3   |     | 4.5   | 4.4   | 4.4   | 4.2  | 4.4   | 4.4   |
| All-Red Time (s)        | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 2.2   | 2.2   | 3.0  | 2.2   | 2.2   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Lost Time (s)     | 7.3                                                                                | 7.3   | 7.3   | 6.5  | 7.3   |     | 7.5   | 6.6   | 6.6   | 7.2  | 6.6   | 6.6   |
| Lead/Lag                | Lead                                                                               | Lag   | Lag   | Lead | Lag   |     | Lag   | Lag   | Lag   | Lead | Lead  | Lead  |
| Lead-Lag Optimize?      | Yes                                                                                | Yes   | Yes   | Yes  | Yes   |     | Yes   | Yes   | Yes   | Yes  | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None | None  |     | None  | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s)           |                                                                                    | 4.0   | 4.0   |      | 4.0   |     |       | 4.0   | 4.0   |      | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    | 38.0  | 38.0  |      | 36.0  |     |       | 25.0  | 25.0  |      | 34.0  | 34.0  |
| Pedestrian Calls (#/hr) |                                                                                    | 0     | 0     |      | 0     |     |       | 0     | 0     |      | 0     | 0     |
| Act Effect Green (s)    | 27.7                                                                               | 44.8  | 44.8  | 31.5 | 23.5  |     | 15.5  | 65.4  | 65.4  | 15.0 | 64.6  | 64.6  |
| Actuated g/C Ratio      | 0.17                                                                               | 0.28  | 0.28  | 0.20 | 0.15  |     | 0.10  | 0.41  | 0.41  | 0.09 | 0.40  | 0.40  |
| v/c Ratio               | 1.63                                                                               | 0.75  | 0.49  | 0.54 | 0.80  |     | 1.46  | 1.06  | 0.07  | 0.44 | 0.86  | 0.69  |
| Control Delay           | 329.5                                                                              | 59.4  | 6.5   | 47.6 | 77.6  |     | 273.4 | 95.6  | 0.1   | 69.6 | 66.1  | 38.9  |
| Queue Delay             | 0.0                                                                                | 2.9   | 0.6   | 9.2  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Delay             | 329.5                                                                              | 62.2  | 7.0   | 56.8 | 77.6  |     | 273.4 | 95.6  | 0.1   | 69.6 | 66.1  | 38.9  |
| LOS                     | F                                                                                  | E     | A     | E    | E     |     | F     | F     | A     | E    | E     | D     |
| Approach Delay          |                                                                                    | 208.0 |       |      | 70.6  |     |       | 135.0 |       |      | 57.9  |       |
| Approach LOS            |                                                                                    | F     |       |      | E     |     |       | F     |       |      | E     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 52 (33%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.63

Intersection Signal Delay: 127.3

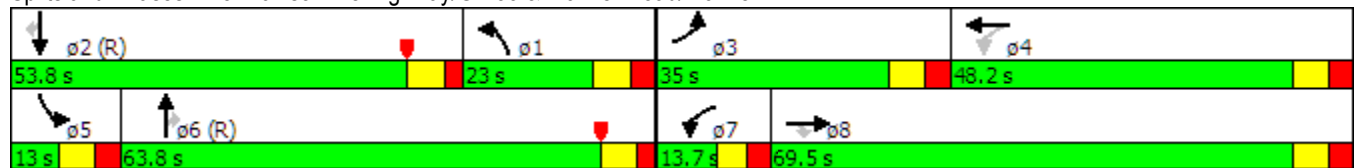
Intersection LOS: F

Intersection Capacity Utilization 106.7%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 8: Dawsonville Highway/GA 53 & McEver Road/McEver





## Lanier Tract DRI

## 9: Dawsonville Highway &amp; Greenhill Circle/Greenhill Circle

no build p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 146                                                                               | 10                                                                                | 152                                                                               | 66                                                                                | 22                                                                                | 42                                                                                | 274                                                                                 | 1931                                                                                | 77                                                                                  | 44                                                                                  | 1537                                                                                | 59                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 3%                                                                                |                                                                                   |                                                                                   | 7%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 190                                                                                 |                                                                                     | 190                                                                                 | 185                                                                                 |                                                                                     | 100                                                                                 |
| Storage Lanes              | 0                                                                                 |                                                                                   | 1                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              |                                                                                   | 0.955                                                                             |                                                                                   |                                                                                   | 0.964                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1787                                                                              | 1591                                                                              | 0                                                                                 | 1767                                                                              | 1558                                                                              | 1796                                                                                | 3592                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   | 0.591                                                                             |                                                                                   |                                                                                   | 0.482                                                                             |                                                                                   | 0.054                                                                               |                                                                                     |                                                                                     | 0.055                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1106                                                                              | 1591                                                                              | 0                                                                                 | 884                                                                               | 1558                                                                              | 102                                                                                 | 3592                                                                                | 1607                                                                                | 104                                                                                 | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 167                                                                               |                                                                                   |                                                                                   | 95                                                                                |                                                                                     |                                                                                     | 54                                                                                  |                                                                                     |                                                                                     | 95                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 288                                                                               |                                                                                   |                                                                                   | 254                                                                               |                                                                                   |                                                                                     | 778                                                                                 |                                                                                     |                                                                                     | 921                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.9                                                                               |                                                                                   |                                                                                   | 6.9                                                                               |                                                                                   |                                                                                     | 11.8                                                                                |                                                                                     |                                                                                     | 14.0                                                                                |                                                                                     |
| Peak Hour Factor           | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.78                                                                              | 0.78                                                                              | 0.78                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 160                                                                               | 11                                                                                | 167                                                                               | 85                                                                                | 28                                                                                | 54                                                                                | 282                                                                                 | 1991                                                                                | 79                                                                                  | 46                                                                                  | 1618                                                                                | 62                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 171                                                                               | 167                                                                               | 0                                                                                 | 113                                                                               | 54                                                                                | 282                                                                                 | 1991                                                                                | 79                                                                                  | 46                                                                                  | 1618                                                                                | 62                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.02                                                                              | 1.02                                                                              | 1.02                                                                              | 1.05                                                                              | 1.05                                                                              | 1.05                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              | 23.0                                                                              | 39.9                                                                              | 39.9                                                                              | 39.9                                                                              | 11.0                                                                                | 28.0                                                                                | 28.0                                                                                | 10.0                                                                                | 36.0                                                                                | 36.0                                                                                |

# Lanier Tract DRI

## 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle

no build p.m.

|                         |  |       |       |       |       |       |       |       |       |      |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL  | SBT   | SBR   |
| Total Split (s)         | 39.9                                                                               | 39.9  | 39.9  | 39.9  | 39.9  | 39.9  | 32.0  | 110.1 | 110.1 | 10.0 | 88.1  | 88.1  |
| Total Split (%)         | 24.9%                                                                              | 24.9% | 24.9% | 24.9% | 24.9% | 24.9% | 20.0% | 68.8% | 68.8% | 6.3% | 55.1% | 55.1% |
| Maximum Green (s)       | 34.0                                                                               | 34.0  | 34.0  | 34.0  | 34.0  | 34.0  | 26.0  | 104.1 | 104.1 | 5.0  | 82.1  | 82.1  |
| Yellow Time (s)         | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 4.4   | 4.4   | 3.5  | 4.4   | 4.4   |
| All-Red Time (s)        | 2.9                                                                                | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 3.0   | 1.6   | 1.6   | 1.5  | 1.6   | 1.6   |
| Lost Time Adjust (s)    |                                                                                    | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Lost Time (s)     |                                                                                    | 5.9   | 5.9   |       | 5.9   | 5.9   | 6.0   | 6.0   | 6.0   | 5.0  | 6.0   | 6.0   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes  | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s)           |                                                                                    |       |       | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |      | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    |       |       | 30.0  | 30.0  | 30.0  |       | 18.0  | 18.0  |      | 26.0  | 26.0  |
| Pedestrian Calls (#/hr) |                                                                                    |       |       | 0     | 0     | 0     |       | 0     | 0     |      | 0     | 0     |
| Act Effect Green (s)    |                                                                                    | 28.1  | 28.1  |       | 28.1  | 28.1  | 120.0 | 111.5 | 111.5 | 96.9 | 90.2  | 90.2  |
| Actuated g/C Ratio      |                                                                                    | 0.18  | 0.18  |       | 0.18  | 0.18  | 0.75  | 0.70  | 0.70  | 0.61 | 0.56  | 0.56  |
| v/c Ratio               |                                                                                    | 0.88  | 0.40  |       | 0.73  | 0.15  | 0.86  | 0.80  | 0.07  | 0.38 | 0.80  | 0.07  |
| Control Delay           |                                                                                    | 103.0 | 9.8   |       | 87.7  | 1.7   | 49.2  | 28.9  | 5.5   | 21.7 | 55.9  | 11.8  |
| Queue Delay             |                                                                                    | 0.0   | 2.3   |       | 78.3  | 0.0   | 0.0   | 47.3  | 0.0   | 0.0  | 1.0   | 0.0   |
| Total Delay             |                                                                                    | 103.0 | 12.1  |       | 166.0 | 1.7   | 49.2  | 76.2  | 5.5   | 21.7 | 56.9  | 11.8  |
| LOS                     |                                                                                    | F     | B     |       | F     | A     | D     | E     | A     | C    | E     | B     |
| Approach Delay          |                                                                                    | 58.1  |       |       | 112.9 |       |       | 70.6  |       |      | 54.3  |       |
| Approach LOS            |                                                                                    | E     |       |       | F     |       |       | E     |       |      | D     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 65.1

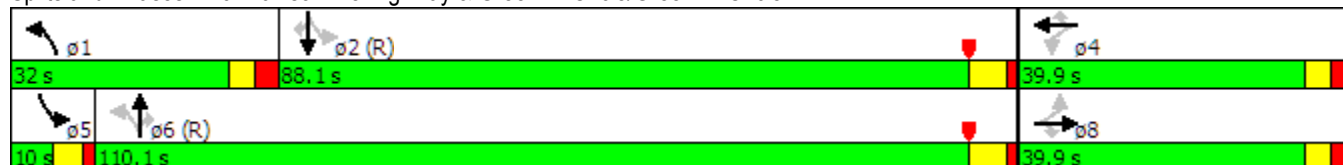
Intersection LOS: E

Intersection Capacity Utilization 87.9%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle



## Lanier Tract DRI

## 10: Dawsonville Highway &amp; Shallowford Rd/Best Buy

no build p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 572                                                                               | 42                                                                                | 29                                                                                | 40                                                                                | 30                                                                                | 8                                                                                 | 44                                                                                  | 1810                                                                                | 126                                                                                 | 8                                                                                   | 1282                                                                                | 511                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | -1%                                                                               |                                                                                   |                                                                                   | 10%                                                                               |                                                                                   |                                                                                     | -4%                                                                                 |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 350                                                                               |                                                                                   | 350                                                                               | 0                                                                                 |                                                                                   | 0                                                                                 | 350                                                                                 |                                                                                     | 150                                                                                 | 265                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 100                                                                               |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             | 0.959                                                                             |                                                                                   |                                                                                   | 0.972                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1723                                                                              | 1740                                                                              | 1623                                                                              | 0                                                                                 | 1754                                                                              | 1534                                                                              | 1841                                                                                | 3682                                                                                | 1647                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             | 0.959                                                                             |                                                                                   |                                                                                   | 0.972                                                                             |                                                                                   | 0.085                                                                               |                                                                                     |                                                                                     | 0.046                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1723                                                                              | 1740                                                                              | 1623                                                                              | 0                                                                                 | 1754                                                                              | 1534                                                                              | 165                                                                                 | 3682                                                                                | 1647                                                                                | 88                                                                                  | 3628                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 106                                                                               |                                                                                   |                                                                                   | 111                                                                               |                                                                                     |                                                                                     | 65                                                                                  |                                                                                     |                                                                                     | 321                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 653                                                                               |                                                                                   |                                                                                   | 178                                                                               |                                                                                   |                                                                                     | 1046                                                                                |                                                                                     |                                                                                     | 778                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 9.9                                                                               |                                                                                   |                                                                                   | 4.9                                                                               |                                                                                   |                                                                                     | 15.8                                                                                |                                                                                     |                                                                                     | 11.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.94                                                                                | 0.94                                                                                | 0.94                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 636                                                                               | 47                                                                                | 32                                                                                | 45                                                                                | 34                                                                                | 9                                                                                 | 47                                                                                  | 1926                                                                                | 134                                                                                 | 9                                                                                   | 1409                                                                                | 562                                                                                 |
| Shared Lane Traffic (%)    | 46%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 343                                                                               | 340                                                                               | 32                                                                                | 0                                                                                 | 79                                                                                | 9                                                                                 | 47                                                                                  | 1926                                                                                | 134                                                                                 | 9                                                                                   | 1409                                                                                | 562                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 0.99                                                                              | 0.99                                                                              | 0.99                                                                              | 1.07                                                                              | 1.07                                                                              | 1.07                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Split                                                                             | NA                                                                                | Perm                                                                              | Split                                                                             | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | Perm                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 3                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 3                                                                                 | 3                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 36.7                                                                              | 36.7                                                                              | 36.7                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                                | 28.8                                                                                | 28.8                                                                                | 30.8                                                                                | 30.8                                                                                | 30.8                                                                                |

# Lanier Tract DRI

## 10: Dawsonville Highway & Shallowford Rd/Best Buy

no build p.m.



| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL  | NBT   | NBR   | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|
| Total Split (s)         | 36.8  | 36.8  | 36.8  | 38.9  | 38.9  | 38.9  | 10.8 | 84.3  | 84.3  | 73.5  | 73.5  | 73.5  |
| Total Split (%)         | 23.0% | 23.0% | 23.0% | 24.3% | 24.3% | 24.3% | 6.8% | 52.7% | 52.7% | 45.9% | 45.9% | 45.9% |
| Maximum Green (s)       | 30.1  | 30.1  | 30.1  | 33.0  | 33.0  | 33.0  | 5.0  | 77.5  | 77.5  | 66.7  | 66.7  | 66.7  |
| Yellow Time (s)         | 4.5   | 4.5   | 4.5   | 3.0   | 3.0   | 3.0   | 3.0  | 4.9   | 4.9   | 4.9   | 4.9   | 4.9   |
| All-Red Time (s)        | 2.2   | 2.2   | 2.2   | 2.9   | 2.9   | 2.9   | 2.8  | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.7   | 6.7   | 6.7   |       | 5.9   | 5.9   | 5.8  | 6.8   | 6.8   | 6.8   | 6.8   | 6.8   |
| Lead/Lag                | Lead  | Lead  | Lead  | Lag   | Lag   | Lag   | Lead |       |       | Lag   | Lag   | Lag   |
| Lead-Lag Optimize?      | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes  |       |       | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None  | None  | None  | None  | None  | None  | None | C-Min | C-Min | C-Min | C-Min | C-Min |
| Walk Time (s)           | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 26.0  | 26.0  | 26.0  | 29.0  | 29.0  | 29.0  |      | 18.0  | 18.0  | 20.0  | 20.0  | 20.0  |
| Pedestrian Calls (#/hr) | 0     | 0     | 0     | 0     | 0     | 0     |      | 0     | 0     | 0     | 0     | 0     |
| Act Effect Green (s)    | 30.1  | 30.1  | 30.1  |       | 12.6  | 12.6  | 98.9 | 97.9  | 97.9  | 87.3  | 87.3  | 87.3  |
| Actuated g/C Ratio      | 0.19  | 0.19  | 0.19  |       | 0.08  | 0.08  | 0.62 | 0.61  | 0.61  | 0.55  | 0.55  | 0.55  |
| v/c Ratio               | 1.06  | 1.04  | 0.08  |       | 0.57  | 0.04  | 0.27 | 0.86  | 0.13  | 0.19  | 0.71  | 0.55  |
| Control Delay           | 126.3 | 121.6 | 0.4   |       | 86.5  | 0.4   | 16.6 | 30.7  | 7.4   | 58.2  | 54.5  | 33.0  |
| Queue Delay             | 1.1   | 1.0   | 0.0   |       | 0.0   | 0.0   | 0.0  | 47.1  | 0.0   | 0.0   | 12.5  | 0.7   |
| Total Delay             | 127.5 | 122.6 | 0.4   |       | 86.5  | 0.4   | 16.6 | 77.8  | 7.4   | 58.2  | 66.9  | 33.7  |
| LOS                     | F     | F     | A     |       | F     | A     | B    | E     | A     | E     | E     | C     |
| Approach Delay          |       | 119.5 |       |       | 77.7  |       |      | 72.0  |       |       | 57.5  |       |
| Approach LOS            |       | F     |       |       | E     |       |      | E     |       |       | E     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 91 (57%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.06

Intersection Signal Delay: 73.1

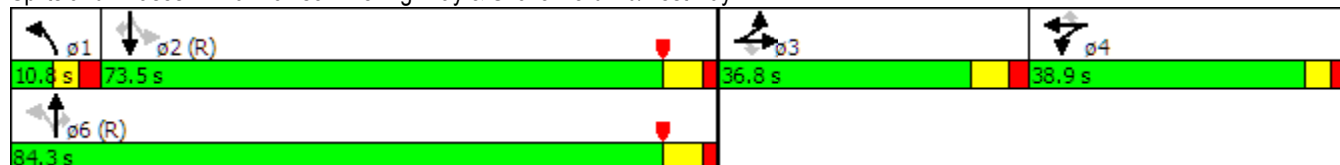
Intersection LOS: E

Intersection Capacity Utilization 87.3%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 10: Dawsonville Highway & Shallowford Rd/Best Buy



## Appendix E

### Future Phase One Intersection Analysis

Lanier Tract DRI  
1: Sportsman Club Road & Strickland Drive

phase one a.m.

| Intersection             |        |       |        |      |        |           |
|--------------------------|--------|-------|--------|------|--------|-----------|
| Int Delay, s/veh         | 4.2    |       |        |      |        |           |
|                          |        |       |        |      |        |           |
| Movement                 | WBL    | WBR   |        | NBT  | NBR    | SBL SBT   |
| Vol, veh/h               | 30     | 0     |        | 7    | 11     | 0 25      |
| Conflicting Peds, #/hr   | 0      | 0     |        | 0    | 0      | 0 0       |
| Sign Control             | Stop   | Stop  |        | Free | Free   | Free Free |
| RT Channelized           | -      | None  |        | -    | None   | - None    |
| Storage Length           | 0      | -     |        | -    | -      | - -       |
| Veh in Median Storage, # | 0      | -     |        | 0    | -      | - 0       |
| Grade, %                 | 0      | -     |        | 0    | -      | - 0       |
| Peak Hour Factor         | 50     | 50    |        | 58   | 58     | 64 64     |
| Heavy Vehicles, %        | 2      | 2     |        | 2    | 2      | 2 2       |
| Mvmt Flow                | 60     | 0     |        | 12   | 19     | 0 39      |
|                          |        |       |        |      |        |           |
| Major/Minor              | Minor1 |       | Major1 |      | Major2 |           |
| Conflicting Flow All     | 61     | 22    | 0      | 0    | 31     | 0         |
| Stage 1                  | 22     | -     | -      | -    | -      | -         |
| Stage 2                  | 39     | -     | -      | -    | -      | -         |
| Critical Hdwy            | 6.42   | 6.22  | -      | -    | 4.12   | -         |
| Critical Hdwy Stg 1      | 5.42   | -     | -      | -    | -      | -         |
| Critical Hdwy Stg 2      | 5.42   | -     | -      | -    | -      | -         |
| Follow-up Hdwy           | 3.518  | 3.318 | -      | -    | 2.218  | -         |
| Pot Cap-1 Maneuver       | 945    | 1055  | -      | -    | 1582   | -         |
| Stage 1                  | 1001   | -     | -      | -    | -      | -         |
| Stage 2                  | 983    | -     | -      | -    | -      | -         |
| Platoon blocked, %       |        |       | -      | -    |        | -         |
| Mov Cap-1 Maneuver       | 945    | 1055  | -      | -    | 1582   | -         |
| Mov Cap-2 Maneuver       | 945    | -     | -      | -    | -      | -         |
| Stage 1                  | 1001   | -     | -      | -    | -      | -         |
| Stage 2                  | 983    | -     | -      | -    | -      | -         |
|                          |        |       |        |      |        |           |
| Approach                 | WB     |       | NB     |      | SB     |           |
| HCM Control Delay, s     | 9.1    |       | 0      |      | 0      |           |
| HCM LOS                  | A      |       |        |      |        |           |
|                          |        |       |        |      |        |           |
| Minor Lane/Major Mvmt    | NBT    | NBR   | WBLn1  | SBL  | SBT    |           |
| Capacity (veh/h)         | -      | -     | 945    | 1582 | -      |           |
| HCM Lane V/C Ratio       | -      | -     | 0.063  | -    | -      |           |
| HCM Control Delay (s)    | -      | -     | 9.1    | 0    | -      |           |
| HCM Lane LOS             | -      | -     | A      | A    | -      |           |
| HCM 95th %tile Q(veh)    | -      | -     | 0.2    | 0    | -      |           |

Lanier Tract DRI  
2: GA 53 & Sportsman Club Road

phase one a.m.

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 23   |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Vol, veh/h               | 14   | 1885 | 0    | 5    | 841  | 15   | 0    | 0    | 0    | 41   | 0    | 23   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 86   | 86   | 86   | 84   | 84   | 84   | 92   | 92   | 92   | 70   | 70   | 70   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 16   | 2192 | 0    | 6    | 1001 | 18   | 0    | 0    | 0    | 59   | 0    | 33   |

| Major/Minor          | Major1 |   |   | Major2 |   |   | Minor1 |      |      | Minor2 |      |      |
|----------------------|--------|---|---|--------|---|---|--------|------|------|--------|------|------|
| Conflicting Flow All | 1019   | 0 | 0 | 2192   | 0 | 0 | 2737   | 3255 | 1096 | 2150   | 3246 | 510  |
| Stage 1              | -      | - | - | -      | - | - | 2224   | 2224 | -    | 1022   | 1022 | -    |
| Stage 2              | -      | - | - | -      | - | - | 513    | 1031 | -    | 1128   | 2224 | -    |
| Critical Hdwy        | 4.14   | - | - | 4.14   | - | - | 7.54   | 6.54 | 6.94 | 7.54   | 6.54 | 6.94 |
| Critical Hdwy Stg 1  | -      | - | - | -      | - | - | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    |
| Critical Hdwy Stg 2  | -      | - | - | -      | - | - | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    |
| Follow-up Hdwy       | 2.22   | - | - | 2.22   | - | - | 3.52   | 4.02 | 3.32 | 3.52   | 4.02 | 3.32 |
| Pot Cap-1 Maneuver   | 677    | - | - | 238    | - | - | 10     | 9    | 208  | ~ 27   | 9    | 509  |
| Stage 1              | -      | - | - | -      | - | - | 44     | 79   | -    | 253    | 312  | -    |
| Stage 2              | -      | - | - | -      | - | - | 512    | 309  | -    | 218    | 79   | -    |
| Platoon blocked, %   | -      | - | - | -      | - | - | -      | -    | -    | -      | -    | -    |
| Mov Cap-1 Maneuver   | 677    | - | - | 238    | - | - | 9      | 9    | 208  | ~ 26   | 9    | 509  |
| Mov Cap-2 Maneuver   | -      | - | - | -      | - | - | 9      | 9    | -    | ~ 26   | 9    | -    |
| Stage 1              | -      | - | - | -      | - | - | 43     | 77   | -    | 247    | 304  | -    |
| Stage 2              | -      | - | - | -      | - | - | 467    | 301  | -    | 213    | 77   | -    |

| Approach             | EB  | WB  | NB | SB       |
|----------------------|-----|-----|----|----------|
| HCM Control Delay, s | 0.1 | 0.1 | 0  | \$ 834.4 |
| HCM LOS              |     |     | A  | F        |

| Minor Lane/Major Mvmt | NBLn1 | EBL   | EBT | EBR | WBL   | WBT | WBR | SBLn1    |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|----------|
| Capacity (veh/h)      | -     | 677   | -   | -   | 238   | -   | -   | 39       |
| HCM Lane V/C Ratio    | -     | 0.024 | -   | -   | 0.025 | -   | -   | 2.344    |
| HCM Control Delay (s) | 0     | 10.4  | -   | -   | 20.5  | -   | -   | \$ 834.4 |
| HCM Lane LOS          | A     | B     | -   | -   | C     | -   | -   | F        |
| HCM 95th %tile Q(veh) | -     | 0.1   | -   | -   | 0.1   | -   | -   | 10       |

| Notes                      |                        |                            |                                |
|----------------------------|------------------------|----------------------------|--------------------------------|
| ~: Volume exceeds capacity | \$: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

Lanier Tract DRI  
3: GA 53 & Avonlea Way

phase one a.m.

| Intersection                                                                                                         |        |      |      |        |       |       |        |       |      |        |      |      |
|----------------------------------------------------------------------------------------------------------------------|--------|------|------|--------|-------|-------|--------|-------|------|--------|------|------|
| Int Delay, s/veh                                                                                                     | 9.8    |      |      |        |       |       |        |       |      |        |      |      |
|                                                                                                                      |        |      |      |        |       |       |        |       |      |        |      |      |
| Movement                                                                                                             | EBL    | EBT  | EBR  | WBL    | WBT   | WBR   | NBL    | NBT   | NBR  | SBL    | SBT  | SBR  |
| Vol, veh/h                                                                                                           | 17     | 0    | 79   | 2      | 0     | 13    | 13     | 866   | 2    | 15     | 1867 | 7    |
| Conflicting Peds, #/hr                                                                                               | 0      | 0    | 0    | 0      | 0     | 0     | 0      | 0     | 0    | 0      | 0    | 0    |
| Sign Control                                                                                                         | Stop   | Stop | Stop | Stop   | Stop  | Stop  | Free   | Free  | Free | Free   | Free | Free |
| RT Channelized                                                                                                       | -      | -    | None | -      | -     | None  | -      | -     | None | -      | -    | None |
| Storage Length                                                                                                       | 0      | -    | 0    | 0      | -     | 0     | 0      | -     | -    | 0      | -    | 0    |
| Veh in Median Storage, #                                                                                             | -      | 0    | -    | -      | 0     | -     | -      | 0     | -    | -      | 0    | -    |
| Grade, %                                                                                                             | -      | 0    | -    | -      | 0     | -     | -      | 0     | -    | -      | 0    | -    |
| Peak Hour Factor                                                                                                     | 84     | 84   | 84   | 80     | 80    | 80    | 88     | 88    | 88   | 86     | 86   | 86   |
| Heavy Vehicles, %                                                                                                    | 2      | 2    | 2    | 2      | 2     | 2     | 2      | 2     | 2    | 2      | 2    | 2    |
| Mvmt Flow                                                                                                            | 20     | 0    | 94   | 2      | 0     | 16    | 15     | 984   | 2    | 17     | 2171 | 8    |
|                                                                                                                      |        |      |      |        |       |       |        |       |      |        |      |      |
| Major/Minor                                                                                                          | Minor2 |      |      | Minor1 |       |       | Major1 |       |      | Major2 |      |      |
| Conflicting Flow All                                                                                                 | 2728   | 3222 | 1085 | 2135   | 3221  | 493   | 2171   | 0     | 0    | 986    | 0    | 0    |
| Stage 1                                                                                                              | 2206   | 2206 | -    | 1015   | 1015  | -     | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 522    | 1016 | -    | 1120   | 2206  | -     | -      | -     | -    | -      | -    | -    |
| Critical Hdwy                                                                                                        | 7.54   | 6.54 | 6.94 | 7.54   | 6.54  | 6.94  | 4.14   | -     | -    | 4.14   | -    | -    |
| Critical Hdwy Stg 1                                                                                                  | 6.54   | 5.54 | -    | 6.54   | 5.54  | -     | -      | -     | -    | -      | -    | -    |
| Critical Hdwy Stg 2                                                                                                  | 6.54   | 5.54 | -    | 6.54   | 5.54  | -     | -      | -     | -    | -      | -    | -    |
| Follow-up Hdwy                                                                                                       | 3.52   | 4.02 | 3.32 | 3.52   | 4.02  | 3.32  | 2.22   | -     | -    | 2.22   | -    | -    |
| Pot Cap-1 Maneuver                                                                                                   | ~ 10   | 10   | 212  | 28     | 10    | 522   | 242    | -     | -    | 696    | -    | -    |
| Stage 1                                                                                                              | 45     | 81   | -    | 255    | 314   | -     | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 506    | 314  | -    | 220    | 81    | -     | -      | -     | -    | -      | -    | -    |
| Platoon blocked, %                                                                                                   |        |      |      |        |       |       |        | -     | -    |        | -    | -    |
| Mov Cap-1 Maneuver                                                                                                   | ~ 9    | 9    | 212  | 15     | 9     | 522   | 242    | -     | -    | 696    | -    | -    |
| Mov Cap-2 Maneuver                                                                                                   | ~ 9    | 9    | -    | 15     | 9     | -     | -      | -     | -    | -      | -    | -    |
| Stage 1                                                                                                              | 42     | 79   | -    | 239    | 295   | -     | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 460    | 295  | -    | 119    | 79    | -     | -      | -     | -    | -      | -    | -    |
|                                                                                                                      |        |      |      |        |       |       |        |       |      |        |      |      |
| Approach                                                                                                             | EB     |      |      | WB     |       |       | NB     |       |      | SB     |      |      |
| HCM Control Delay, s                                                                                                 | 273.3  |      |      | 48.9   |       |       | 0.3    |       |      | 0.1    |      |      |
| HCM LOS                                                                                                              | F      |      |      | E      |       |       |        |       |      |        |      |      |
|                                                                                                                      |        |      |      |        |       |       |        |       |      |        |      |      |
| Minor Lane/Major Mvmt                                                                                                | NBL    | NBT  | NBR  | EBLn1  | EBLn2 | WBLn1 | WBLn2  | SBL   | SBT  | SBR    |      |      |
| Capacity (veh/h)                                                                                                     | 242    | -    | -    | 9      | 212   | 15    | 522    | 696   | -    | -      |      |      |
| HCM Lane V/C Ratio                                                                                                   | 0.061  | -    | -    | 2.249  | 0.444 | 0.167 | 0.031  | 0.025 | -    | -      |      |      |
| HCM Control Delay (s)                                                                                                | 20.8   | -    | \$   | 1381.4 | 34.9  | 288.1 | 12.1   | 10.3  | -    | -      |      |      |
| HCM Lane LOS                                                                                                         | C      | -    | -    | F      | D     | F     | B      | B     | -    | -      |      |      |
| HCM 95th %tile Q(veh)                                                                                                | 0.2    | -    | -    | 3.5    | 2.1   | 0.5   | 0.1    | 0.1   | -    | -      |      |      |
| Notes                                                                                                                |        |      |      |        |       |       |        |       |      |        |      |      |
| ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |        |      |      |        |       |       |        |       |      |        |      |      |



Lanier Tract DRI  
4: GA 53 & Canterbury Road

phase one a.m.

| Intersection                                                                                                         |        |      |      |           |       |          |        |       |      |        |      |      |
|----------------------------------------------------------------------------------------------------------------------|--------|------|------|-----------|-------|----------|--------|-------|------|--------|------|------|
| Int Delay, s/veh                                                                                                     | 12.4   |      |      |           |       |          |        |       |      |        |      |      |
|                                                                                                                      |        |      |      |           |       |          |        |       |      |        |      |      |
| Movement                                                                                                             | EBL    | EBT  | EBR  | WBL       | WBT   | WBR      | NBL    | NBT   | NBR  | SBL    | SBT  | SBR  |
| Vol, veh/h                                                                                                           | 20     | 0    | 105  | 3         | 0     | 2        | 25     | 826   | 3    | 2      | 1994 | 8    |
| Conflicting Peds, #/hr                                                                                               | 0      | 0    | 0    | 0         | 0     | 0        | 0      | 0     | 0    | 0      | 0    | 0    |
| Sign Control                                                                                                         | Stop   | Stop | Stop | Stop      | Stop  | Stop     | Free   | Free  | Free | Free   | Free | Free |
| RT Channelized                                                                                                       | -      | -    | None | -         | -     | None     | -      | -     | None | -      | -    | None |
| Storage Length                                                                                                       | 0      | -    | 0    | 0         | -     | 0        | 0      | -     | -    | 0      | -    | 0    |
| Veh in Median Storage, #                                                                                             | -      | 0    | -    | -         | 0     | -        | -      | 0     | -    | -      | 0    | -    |
| Grade, %                                                                                                             | -      | 0    | -    | -         | 0     | -        | -      | 0     | -    | -      | 0    | -    |
| Peak Hour Factor                                                                                                     | 88     | 92   | 88   | 92        | 92    | 92       | 86     | 86    | 92   | 92     | 91   | 91   |
| Heavy Vehicles, %                                                                                                    | 2      | 2    | 2    | 2         | 2     | 2        | 2      | 2     | 2    | 2      | 2    | 2    |
| Mvmt Flow                                                                                                            | 23     | 0    | 119  | 3         | 0     | 2        | 29     | 960   | 3    | 2      | 2191 | 9    |
|                                                                                                                      |        |      |      |           |       |          |        |       |      |        |      |      |
| Major/Minor                                                                                                          | Minor2 |      |      | Minor1    |       |          | Major1 |       |      | Major2 |      |      |
| Conflicting Flow All                                                                                                 | 2734   | 3218 | 1096 | 2120      | 3216  | 482      | 2191   | 0     | 0    | 964    | 0    | 0    |
| Stage 1                                                                                                              | 2196   | 2196 | -    | 1020      | 1020  | -        | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 538    | 1022 | -    | 1100      | 2196  | -        | -      | -     | -    | -      | -    | -    |
| Critical Hdwy                                                                                                        | 7.54   | 6.54 | 6.94 | 7.54      | 6.54  | 6.94     | 4.14   | -     | -    | 4.14   | -    | -    |
| Critical Hdwy Stg 1                                                                                                  | 6.54   | 5.54 | -    | 6.54      | 5.54  | -        | -      | -     | -    | -      | -    | -    |
| Critical Hdwy Stg 2                                                                                                  | 6.54   | 5.54 | -    | 6.54      | 5.54  | -        | -      | -     | -    | -      | -    | -    |
| Follow-up Hdwy                                                                                                       | 3.52   | 4.02 | 3.32 | 3.52      | 4.02  | 3.32     | 2.22   | -     | -    | 2.22   | -    | -    |
| Pot Cap-1 Maneuver                                                                                                   | ~ 10   | 10   | 208  | 29        | 10    | 530      | 238    | -     | -    | 710    | -    | -    |
| Stage 1                                                                                                              | 46     | 82   | -    | 253       | 312   | -        | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 495    | 312  | -    | 226       | 82    | -        | -      | -     | -    | -      | -    | -    |
| Platoon blocked, %                                                                                                   |        |      |      |           |       |          |        | -     | -    |        | -    | -    |
| Mov Cap-1 Maneuver                                                                                                   | ~ 9    | 9    | 208  | 11        | 9     | 530      | 238    | -     | -    | 710    | -    | -    |
| Mov Cap-2 Maneuver                                                                                                   | ~ 9    | 9    | -    | 11        | 9     | -        | -      | -     | -    | -      | -    | -    |
| Stage 1                                                                                                              | 40     | 82   | -    | 222       | 274   | -        | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 433    | 274  | -    | 96        | 82    | -        | -      | -     | -    | -      | -    | -    |
|                                                                                                                      |        |      |      |           |       |          |        |       |      |        |      |      |
| Approach                                                                                                             | EB     |      |      | WB        |       |          | NB     |       |      | SB     |      |      |
| HCM Control Delay, s                                                                                                 | 277.1  |      |      | 266.4     |       |          | 0.7    |       |      | 0      |      |      |
| HCM LOS                                                                                                              | F      |      |      | F         |       |          |        |       |      |        |      |      |
|                                                                                                                      |        |      |      |           |       |          |        |       |      |        |      |      |
| Minor Lane/Major Mvmt                                                                                                | NBL    | NBT  | NBR  | EBLn1     | EBLn2 | WBLn1    | WBLn2  | SBL   | SBT  | SBR    |      |      |
| Capacity (veh/h)                                                                                                     | 238    | -    | -    | 9         | 208   | 11       | 530    | 710   | -    | -      |      |      |
| HCM Lane V/C Ratio                                                                                                   | 0.122  | -    | -    | 2.525     | 0.574 | 0.296    | 0.004  | 0.003 | -    | -      |      |      |
| HCM Control Delay (s)                                                                                                | 22.2   | -    |      | \$ 1504.7 | 43.3  | \$ 436.1 | 11.8   | 10.1  | -    | -      |      |      |
| HCM Lane LOS                                                                                                         | C      | -    | -    | F         | E     | F        | B      | B     | -    | -      |      |      |
| HCM 95th %tile Q(veh)                                                                                                | 0.4    | -    | -    | 3.9       | 3.1   | 0.7      | 0      | 0     | -    | -      |      |      |
| Notes                                                                                                                |        |      |      |           |       |          |        |       |      |        |      |      |
| ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |        |      |      |           |       |          |        |       |      |        |      |      |

Lanier Tract DRI  
7: GA 53 & Beechwood Boulevard

phase one a.m.

| Intersection                                                                                                         |        |        |        |        |      |      |
|----------------------------------------------------------------------------------------------------------------------|--------|--------|--------|--------|------|------|
| Int Delay, s/veh                                                                                                     | 3.3    |        |        |        |      |      |
| Movement                                                                                                             | EBL    | EBR    | NBL    | NBT    | SBT  | SBR  |
| Vol, veh/h                                                                                                           | 6      | 45     | 30     | 930    | 2288 | 2    |
| Conflicting Peds, #/hr                                                                                               | 0      | 0      | 0      | 0      | 0    | 0    |
| Sign Control                                                                                                         | Stop   | Stop   | Free   | Free   | Free | Free |
| RT Channelized                                                                                                       | -      | Yield  | -      | Yield  | -    | None |
| Storage Length                                                                                                       | 0      | 0      | 200    | -      | -    | 360  |
| Veh in Median Storage, #                                                                                             | 0      | -      | -      | 0      | 0    | -    |
| Grade, %                                                                                                             | 0      | -      | -      | 1      | 0    | -    |
| Peak Hour Factor                                                                                                     | 82     | 82     | 87     | 87     | 89   | 89   |
| Heavy Vehicles, %                                                                                                    | 0      | 0      | 0      | 1      | 0    | 0    |
| Mvmt Flow                                                                                                            | 7      | 55     | 34     | 1069   | 2571 | 2    |
| Major/Minor                                                                                                          | Minor2 | Major1 |        | Major2 |      |      |
| Conflicting Flow All                                                                                                 | 3174   | 1285   | 2571   | 0      | -    | 0    |
| Stage 1                                                                                                              | 2571   | -      | -      | -      | -    | -    |
| Stage 2                                                                                                              | 603    | -      | -      | -      | -    | -    |
| Critical Hdwy                                                                                                        | 6.8    | 6.9    | 4.1    | -      | -    | -    |
| Critical Hdwy Stg 1                                                                                                  | 5.8    | -      | -      | -      | -    | -    |
| Critical Hdwy Stg 2                                                                                                  | 5.8    | -      | -      | -      | -    | -    |
| Follow-up Hdwy                                                                                                       | 3.5    | 3.3    | 2.2    | -      | -    | -    |
| Pot Cap-1 Maneuver                                                                                                   | 8      | 158    | 174    | -      | -    | -    |
| Stage 1                                                                                                              | 45     | -      | -      | -      | -    | -    |
| Stage 2                                                                                                              | 515    | -      | -      | -      | -    | -    |
| Platoon blocked, %                                                                                                   |        |        |        | -      | -    | -    |
| Mov Cap-1 Maneuver                                                                                                   | ~ 6    | 158    | 174    | -      | -    | -    |
| Mov Cap-2 Maneuver                                                                                                   | ~ 6    | -      | -      | -      | -    | -    |
| Stage 1                                                                                                              | 45     | -      | -      | -      | -    | -    |
| Stage 2                                                                                                              | 414    | -      | -      | -      | -    | -    |
| Approach                                                                                                             | EB     | NB     |        | SB     |      |      |
| HCM Control Delay, s                                                                                                 | 179.5  | 1      |        | 0      |      |      |
| HCM LOS                                                                                                              | F      |        |        |        |      |      |
| Minor Lane/Major Mvmt                                                                                                | NBL    | NBT    | EBLn1  | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)                                                                                                     | 174    | -      | 6      | 158    | -    | -    |
| HCM Lane V/C Ratio                                                                                                   | 0.198  | -      | 1.22   | 0.347  | -    | -    |
| HCM Control Delay (s)                                                                                                | 30.7   | \$     | 1230.3 | 39.4   | -    | -    |
| HCM Lane LOS                                                                                                         | D      | -      | F      | E      | -    | -    |
| HCM 95th %tile Q(veh)                                                                                                | 0.7    | -      | 1.7    | 1.4    | -    | -    |
| Notes                                                                                                                |        |        |        |        |      |      |
| ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |        |        |        |        |      |      |

Lanier Tract DRI

5: GA 53 & Lanier Valley Dr/Ahaluna Dr

phase one a.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Volume (vph)               | 21                                                                                | 6                                                                                 | 127                                                                               | 92                                                                                | 3                                                                                 | 27                                                                                | 61                                                                                  | 800                                                                                 | 47                                                                                  | 21                                                                                  | 2121                                                                                | 0                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 2%                                                                                |                                                                                   |                                                                                   | -4%                                                                               |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 100                                                                                 |                                                                                     | 0                                                                                   | 140                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.889                                                                             |                                                                                   |                                                                                   | 0.970                                                                             |                                                                                   |                                                                                     | 0.992                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   | 0.993                                                                             |                                                                                   |                                                                                   | 0.964                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1661                                                                              | 0                                                                                 | 0                                                                                 | 1812                                                                              | 0                                                                                 | 1796                                                                                | 3497                                                                                | 0                                                                                   | 1814                                                                                | 3628                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.945                                                                             |                                                                                   |                                                                                   | 0.481                                                                             |                                                                                   | 0.037                                                                               |                                                                                     |                                                                                     | 0.288                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1580                                                                              | 0                                                                                 | 0                                                                                 | 904                                                                               | 0                                                                                 | 70                                                                                  | 3497                                                                                | 0                                                                                   | 550                                                                                 | 3628                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 58                                                                                |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 340                                                                               |                                                                                   |                                                                                   | 322                                                                               |                                                                                   |                                                                                     | 888                                                                                 |                                                                                     |                                                                                     | 1417                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.7                                                                               |                                                                                   |                                                                                   | 7.3                                                                               |                                                                                   |                                                                                     | 13.5                                                                                |                                                                                     |                                                                                     | 21.5                                                                                |                                                                                     |
| Peak Hour Factor           | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.83                                                                              | 0.83                                                                              | 0.83                                                                              | 0.85                                                                                | 0.85                                                                                | 0.85                                                                                | 0.87                                                                                | 0.87                                                                                | 0.87                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 23                                                                                | 7                                                                                 | 140                                                                               | 111                                                                               | 4                                                                                 | 33                                                                                | 72                                                                                  | 941                                                                                 | 55                                                                                  | 24                                                                                  | 2438                                                                                | 0                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 170                                                                               | 0                                                                                 | 0                                                                                 | 148                                                                               | 0                                                                                 | 72                                                                                  | 996                                                                                 | 0                                                                                   | 24                                                                                  | 2438                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 |                                                                                     | 0                                                                                   | 336                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   |                                                                                     | 0                                                                                   | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 8                                                                                 | 8                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 10.6                                                                                | 23.0                                                                                |                                                                                     | 23.0                                                                                | 23.0                                                                                |                                                                                     |

# Lanier Tract DRI

## 5: GA 53 & Lanier Valley Dr/Ahaluna Dr

phase one a.m.

| Lane Group            | EBL   | EBT   | EBR | WBL   | WBT   | WBR | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
|-----------------------|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Total Split (s)       | 30.0  | 30.0  |     | 30.0  | 30.0  |     | 10.6  | 120.0 |     | 109.4 | 109.4 |     |
| Total Split (%)       | 20.0% | 20.0% |     | 20.0% | 20.0% |     | 7.1%  | 80.0% |     | 72.9% | 72.9% |     |
| Maximum Green (s)     | 23.4  | 23.4  |     | 23.4  | 23.4  |     | 5.0   | 113.9 |     | 103.3 | 103.3 |     |
| Yellow Time (s)       | 4.0   | 4.0   |     | 4.0   | 4.0   |     | 3.0   | 4.5   |     | 4.5   | 4.5   |     |
| All-Red Time (s)      | 2.6   | 2.6   |     | 2.6   | 2.6   |     | 2.6   | 1.6   |     | 1.6   | 1.6   |     |
| Lost Time Adjust (s)  |       | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Lost Time (s)   |       | 6.6   |     |       | 6.6   |     | 5.6   | 6.1   |     | 6.1   | 6.1   |     |
| Lead/Lag              |       |       |     |       |       |     | Lead  |       |     | Lag   | Lag   |     |
| Lead-Lag Optimize?    |       |       |     |       |       |     | Yes   |       |     | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode           | None  | None  |     | None  | None  |     | None  | C-Max |     | C-Max | C-Max |     |
| Act Effect Green (s)  |       | 23.4  |     |       | 23.4  |     | 114.4 | 113.9 |     | 103.3 | 103.3 |     |
| Actuated g/C Ratio    |       | 0.16  |     |       | 0.16  |     | 0.76  | 0.76  |     | 0.69  | 0.69  |     |
| v/c Ratio             |       | 0.58  |     |       | 1.01  |     | 0.65  | 0.37  |     | 0.06  | 0.98  |     |
| Control Delay         |       | 46.8  |     |       | 134.1 |     | 57.6  | 3.1   |     | 8.1   | 35.6  |     |
| Queue Delay           |       | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay           |       | 46.8  |     |       | 134.1 |     | 57.6  | 3.1   |     | 8.1   | 35.6  |     |
| LOS                   |       | D     |     |       | F     |     | E     | A     |     | A     | D     |     |
| Approach Delay        |       | 46.8  |     |       | 134.1 |     |       | 6.8   |     |       | 35.3  |     |
| Approach LOS          |       | D     |     |       | F     |     |       | A     |     |       | D     |     |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 26 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.01

Intersection Signal Delay: 31.7

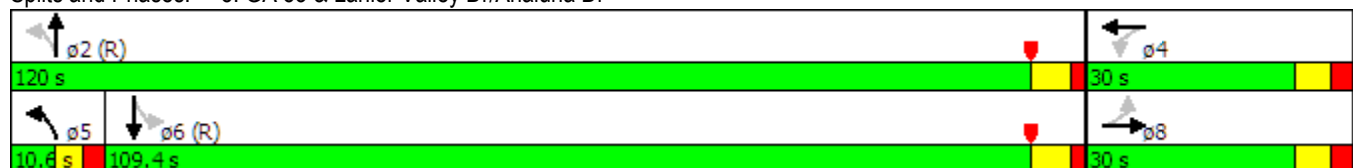
Intersection LOS: C

Intersection Capacity Utilization 90.9%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 5: GA 53 & Lanier Valley Dr/Ahaluna Dr



## Lanier Tract DRI

## 6: 53-Dawsonville Hwy &amp; Academy Sports

phase one a.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |  |  |  |  |  |  |  |
| Volume (vph)               | 2                                                                                 | 0                                                                                 | 7                                                                                 | 2                                                                                 | 0                                                                                 | 0                                                                                 | 12                                                                                  | 878                                                                                 | 10                                                                                  | 6                                                                                   | 2269                                                                                | 4                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 4%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 70                                                                                | 200                                                                                 |                                                                                     | 170                                                                                 | 190                                                                                 |                                                                                     | 360                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1805                                                                              | 1900                                                                              | 1615                                                                              | 1769                                                                              | 1862                                                                              | 1862                                                                              | 1796                                                                                | 3556                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 0.031                                                                               |                                                                                     |                                                                                     | 0.277                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1900                                                                              | 1900                                                                              | 1615                                                                              | 1862                                                                              | 1862                                                                              | 1862                                                                              | 59                                                                                  | 3556                                                                                | 1607                                                                                | 526                                                                                 | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 67                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 68                                                                                  |                                                                                     |                                                                                     | 68                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 262                                                                               |                                                                                   |                                                                                   | 246                                                                               |                                                                                   |                                                                                     | 1836                                                                                |                                                                                     |                                                                                     | 685                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.1                                                                               |                                                                                   |                                                                                   | 6.7                                                                               |                                                                                   |                                                                                     | 27.8                                                                                |                                                                                     |                                                                                     | 10.4                                                                                |                                                                                     |
| Peak Hour Factor           | 0.67                                                                              | 0.67                                                                              | 0.67                                                                              | 0.50                                                                              | 0.50                                                                              | 0.50                                                                              | 0.86                                                                                | 0.86                                                                                | 0.86                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 3                                                                                 | 0                                                                                 | 10                                                                                | 4                                                                                 | 0                                                                                 | 0                                                                                 | 14                                                                                  | 1021                                                                                | 12                                                                                  | 7                                                                                   | 2521                                                                                | 4                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 3                                                                                 | 0                                                                                 | 10                                                                                | 4                                                                                 | 0                                                                                 | 0                                                                                 | 14                                                                                  | 1021                                                                                | 12                                                                                  | 7                                                                                   | 2521                                                                                | 4                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              |                                                                                   | Perm                                                                              | Perm                                                                              |                                                                                   | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 2                                                                                   |                                                                                     | 2                                                                                   | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 42.0                                                                              | 42.0                                                                              | 42.0                                                                              | 42.4                                                                              | 42.4                                                                              | 42.4                                                                              | 11.4                                                                                | 30.3                                                                                | 30.3                                                                                | 11.0                                                                                | 29.3                                                                                | 29.3                                                                                |

Synchro 8 Report

Marc R Acampora, PE, LLC

# Lanier Tract DRI

## 6: 53-Dawsonville Hwy & Academy Sports

phase one a.m.

|                         |  |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 42.4                                                                               | 42.4  | 42.4  | 42.4  | 42.4  | 42.4  | 11.4  | 96.6  | 96.6  | 11.0  | 96.2  | 96.2  |
| Total Split (%)         | 28.3%                                                                              | 28.3% | 28.3% | 28.3% | 28.3% | 28.3% | 7.6%  | 64.4% | 64.4% | 7.3%  | 64.1% | 64.1% |
| Maximum Green (s)       | 36.0                                                                               | 36.0  | 36.0  | 36.0  | 36.0  | 36.0  | 5.0   | 90.4  | 90.4  | 5.0   | 90.0  | 90.0  |
| Yellow Time (s)         | 3.4                                                                                | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 4.3   | 4.3   | 3.0   | 4.3   | 4.3   |
| All-Red Time (s)        | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 1.9   | 1.9   | 3.0   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.4                                                                                | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.2   | 6.2   | 6.0   | 6.2   | 6.2   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           | 4.0                                                                                | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 23.0                                                                               | 23.0  | 23.0  | 32.0  | 32.0  | 32.0  |       | 20.0  | 20.0  |       | 19.0  | 19.0  |
| Pedestrian Calls (#/hr) | 0                                                                                  | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    | 6.1                                                                                |       | 6.1   | 6.1   |       |       | 137.2 | 139.9 | 139.9 | 136.1 | 137.4 | 137.4 |
| Actuated g/C Ratio      | 0.04                                                                               |       | 0.04  | 0.04  |       |       | 0.91  | 0.93  | 0.93  | 0.91  | 0.92  | 0.92  |
| v/c Ratio               | 0.04                                                                               |       | 0.08  | 0.05  |       |       | 0.12  | 0.31  | 0.01  | 0.01  | 0.76  | 0.00  |
| Control Delay           | 69.5                                                                               |       | 1.1   | 70.0  |       |       | 6.2   | 1.0   | 0.0   | 0.8   | 4.9   | 0.0   |
| Queue Delay             | 0.0                                                                                |       | 0.0   | 0.0   |       |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay             | 69.5                                                                               |       | 1.1   | 70.0  |       |       | 6.2   | 1.0   | 0.0   | 0.8   | 4.9   | 0.0   |
| LOS                     | E                                                                                  |       | A     | E     |       |       | A     | A     | A     | A     | A     | A     |
| Approach Delay          |                                                                                    |       |       |       |       |       |       | 1.1   |       |       | 4.9   |       |
| Approach LOS            |                                                                                    |       |       |       |       |       |       | A     |       |       | A     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 27 (18%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 145

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.76

Intersection Signal Delay: 3.9

Intersection LOS: A

Intersection Capacity Utilization 86.9%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 6: 53-Dawsonville Hwy & Academy Sports

|                                                                                        |                                                                                            |  |                                                                                          |
|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------|
|  p1 |  p2 (R) |  |  p4 |
| 11 s                                                                                   | 96.6 s                                                                                     |  | 42.4 s                                                                                   |
|  p5 |  p6 (R) |  |  p8 |
| 11.4 s                                                                                 | 96.2 s                                                                                     |  | 42.4 s                                                                                   |

## Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 &amp; McEver Road/McEver

phase one a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |                                                                                   |   |  |  |  |  |  |
| Volume (vph)               | 450                                                                               | 31                                                                                | 378                                                                               | 46                                                                                | 21                                                                                | 22                                                                                | 311                                                                                 | 553                                                                                 | 61                                                                                  | 34                                                                                  | 1341                                                                                | 935                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 1%                                                                                |                                                                                   |                                                                                   | 5%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 180                                                                               |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 310                                                                                 |                                                                                     | 185                                                                                 | 255                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 50                                                                                |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.872                                                                             | 0.850                                                                             |                                                                                   | 0.924                                                                             |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 3484                                                                              | 1566                                                                              | 1527                                                                              | 1760                                                                              | 1712                                                                              | 0                                                                                 | 3484                                                                                | 3487                                                                                | 1575                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   | 0.599                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 3484                                                                              | 1566                                                                              | 1527                                                                              | 1110                                                                              | 1712                                                                              | 0                                                                                 | 3484                                                                                | 3487                                                                                | 1575                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 183                                                                               | 207                                                                               |                                                                                   | 34                                                                                |                                                                                   |                                                                                     |                                                                                     | 184                                                                                 |                                                                                     |                                                                                     | 542                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 45                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 580                                                                               |                                                                                   |                                                                                   | 331                                                                               |                                                                                   |                                                                                     | 921                                                                                 |                                                                                     |                                                                                     | 1624                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 8.8                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                     | 14.0                                                                                |                                                                                     |                                                                                     | 24.6                                                                                |                                                                                     |
| Peak Hour Factor           | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.62                                                                              | 0.62                                                                              | 0.62                                                                              | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 3%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 464                                                                               | 32                                                                                | 390                                                                               | 74                                                                                | 34                                                                                | 35                                                                                | 334                                                                                 | 595                                                                                 | 66                                                                                  | 38                                                                                  | 1490                                                                                | 1039                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   | 47%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 464                                                                               | 215                                                                               | 207                                                                               | 74                                                                                | 69                                                                                | 0                                                                                 | 334                                                                                 | 595                                                                                 | 66                                                                                  | 38                                                                                  | 1490                                                                                | 1039                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 24                                                                                |                                                                                   |                                                                                   | 24                                                                                |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                             | NA                                                                                |                                                                                   | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 8                                                                                 |                                                                                   | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 8                                                                                 | 8                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 13.2                                                                              | 50.2                                                                              | 50.2                                                                              | 11.6                                                                              | 48.2                                                                              |                                                                                   | 13.4                                                                                | 35.6                                                                                | 35.6                                                                                | 12.9                                                                                | 44.6                                                                                | 44.6                                                                                |

# Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 & McEver Road/McEver

phase one a.m.

|                         |  |       |       |      |       |     |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|------|-------|-----|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL  | WBT   | WBR | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 23.0                                                                               | 59.1  | 59.1  | 12.1 | 48.2  |     | 19.0  | 63.0  | 63.0  | 15.8  | 59.8  | 59.8  |
| Total Split (%)         | 15.3%                                                                              | 39.4% | 39.4% | 8.1% | 32.1% |     | 12.7% | 42.0% | 42.0% | 10.5% | 39.9% | 39.9% |
| Maximum Green (s)       | 15.7                                                                               | 51.8  | 51.8  | 5.6  | 40.9  |     | 11.5  | 56.4  | 56.4  | 8.6   | 53.2  | 53.2  |
| Yellow Time (s)         | 4.3                                                                                | 4.3   | 4.3   | 3.5  | 4.3   |     | 4.5   | 4.4   | 4.4   | 4.2   | 4.4   | 4.4   |
| All-Red Time (s)        | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 2.2   | 2.2   | 3.0   | 2.2   | 2.2   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 7.3                                                                                | 7.3   | 7.3   | 6.5  | 7.3   |     | 7.5   | 6.6   | 6.6   | 7.2   | 6.6   | 6.6   |
| Lead/Lag                | Lead                                                                               | Lag   | Lag   | Lead | Lag   |     | Lag   | Lag   | Lag   | Lead  | Lead  | Lead  |
| Lead-Lag Optimize?      | Yes                                                                                | Yes   | Yes   | Yes  | Yes   |     | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None | None  |     | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           |                                                                                    | 4.0   | 4.0   |      | 4.0   |     |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    | 38.0  | 38.0  |      | 36.0  |     |       | 25.0  | 25.0  |       | 34.0  | 34.0  |
| Pedestrian Calls (#/hr) |                                                                                    | 0     | 0     |      | 0     |     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    | 16.1                                                                               | 17.6  | 17.6  | 14.0 | 8.9   |     | 11.5  | 93.2  | 93.2  | 8.5   | 87.4  | 87.4  |
| Actuated g/C Ratio      | 0.11                                                                               | 0.12  | 0.12  | 0.09 | 0.06  |     | 0.08  | 0.62  | 0.62  | 0.06  | 0.58  | 0.58  |
| v/c Ratio               | 1.24                                                                               | 0.62  | 0.57  | 0.58 | 0.52  |     | 1.25  | 0.27  | 0.06  | 0.37  | 0.70  | 0.89  |
| Control Delay           | 183.1                                                                              | 20.5  | 13.4  | 70.0 | 51.0  |     | 197.4 | 17.7  | 1.4   | 74.8  | 23.9  | 17.1  |
| Queue Delay             | 0.0                                                                                | 0.0   | 0.0   | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay             | 183.1                                                                              | 20.5  | 13.4  | 70.0 | 51.0  |     | 197.4 | 17.7  | 1.4   | 74.8  | 23.9  | 17.1  |
| LOS                     | F                                                                                  | C     | B     | E    | D     |     | F     | B     | A     | E     | C     | B     |
| Approach Delay          |                                                                                    | 104.0 |       |      | 60.9  |     |       | 77.0  |       |       | 21.9  |       |
| Approach LOS            |                                                                                    | F     |       |      | E     |     |       | E     |       |       | C     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 19 (13%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.25

Intersection Signal Delay: 50.9

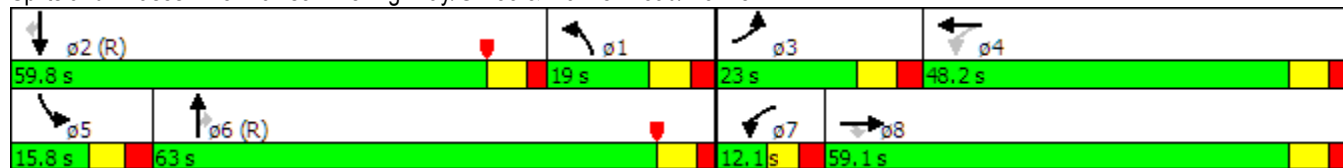
Intersection LOS: D

Intersection Capacity Utilization 88.8%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 8: Dawsonville Highway/GA 53 & McEver Road/McEver





## Lanier Tract DRI

## 9: Dawsonville Highway &amp; Greenhill Circle/Greenhill Circle

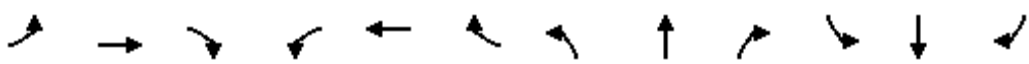
phase one a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 74                                                                                | 1                                                                                 | 156                                                                               | 7                                                                                 | 1                                                                                 | 4                                                                                 | 149                                                                                 | 872                                                                                 | 11                                                                                  | 13                                                                                  | 1599                                                                                | 57                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 3%                                                                                |                                                                                   |                                                                                   | 7%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 190                                                                                 |                                                                                     | 190                                                                                 | 185                                                                                 |                                                                                     | 100                                                                                 |
| Storage Lanes              | 0                                                                                 |                                                                                   | 1                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              |                                                                                   | 0.953                                                                             |                                                                                   |                                                                                   | 0.957                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1784                                                                              | 1591                                                                              | 0                                                                                 | 1755                                                                              | 1558                                                                              | 1796                                                                                | 3522                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   | 0.721                                                                             |                                                                                   |                                                                                   | 0.751                                                                             |                                                                                   | 0.074                                                                               |                                                                                     |                                                                                     | 0.283                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1349                                                                              | 1591                                                                              | 0                                                                                 | 1377                                                                              | 1558                                                                              | 140                                                                                 | 3522                                                                                | 1607                                                                                | 538                                                                                 | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 131                                                                               |                                                                                   |                                                                                   | 102                                                                               |                                                                                     |                                                                                     | 57                                                                                  |                                                                                     |                                                                                     | 101                                                                                 |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 288                                                                               |                                                                                   |                                                                                   | 254                                                                               |                                                                                   |                                                                                     | 778                                                                                 |                                                                                     |                                                                                     | 921                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.9                                                                               |                                                                                   |                                                                                   | 6.9                                                                               |                                                                                   |                                                                                     | 11.8                                                                                |                                                                                     |                                                                                     | 14.0                                                                                |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.69                                                                              | 0.69                                                                              | 0.69                                                                              | 0.86                                                                                | 0.86                                                                                | 0.86                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 82                                                                                | 1                                                                                 | 173                                                                               | 10                                                                                | 1                                                                                 | 6                                                                                 | 173                                                                                 | 1014                                                                                | 13                                                                                  | 14                                                                                  | 1738                                                                                | 62                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 83                                                                                | 173                                                                               | 0                                                                                 | 11                                                                                | 6                                                                                 | 173                                                                                 | 1014                                                                                | 13                                                                                  | 14                                                                                  | 1738                                                                                | 62                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.02                                                                              | 1.02                                                                              | 1.02                                                                              | 1.05                                                                              | 1.05                                                                              | 1.05                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              | 23.0                                                                              | 39.9                                                                              | 39.9                                                                              | 39.9                                                                              | 11.0                                                                                | 28.0                                                                                | 28.0                                                                                | 10.0                                                                                | 36.0                                                                                | 36.0                                                                                |

# Lanier Tract DRI

## 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle

phase one a.m.

|                         |  |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 39.9                                                                               | 39.9  | 39.9  | 39.9  | 39.9  | 39.9  | 21.0  | 100.1 | 100.1 | 10.0  | 89.1  | 89.1  |
| Total Split (%)         | 26.6%                                                                              | 26.6% | 26.6% | 26.6% | 26.6% | 26.6% | 14.0% | 66.7% | 66.7% | 6.7%  | 59.4% | 59.4% |
| Maximum Green (s)       | 34.0                                                                               | 34.0  | 34.0  | 34.0  | 34.0  | 34.0  | 15.0  | 94.1  | 94.1  | 5.0   | 83.1  | 83.1  |
| Yellow Time (s)         | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 4.4   | 4.4   | 3.5   | 4.4   | 4.4   |
| All-Red Time (s)        | 2.9                                                                                | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 3.0   | 1.6   | 1.6   | 1.5   | 1.6   | 1.6   |
| Lost Time Adjust (s)    |                                                                                    | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |                                                                                    | 5.9   | 5.9   |       | 5.9   | 5.9   | 6.0   | 6.0   | 6.0   | 5.0   | 6.0   | 6.0   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           |                                                                                    |       |       | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    |       |       | 30.0  | 30.0  | 30.0  |       | 18.0  | 18.0  |       | 26.0  | 26.0  |
| Pedestrian Calls (#/hr) |                                                                                    |       |       | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    |                                                                                    | 14.6  | 14.6  |       | 14.6  | 14.6  | 123.5 | 119.1 | 119.1 | 108.7 | 102.0 | 102.0 |
| Actuated g/C Ratio      |                                                                                    | 0.10  | 0.10  |       | 0.10  | 0.10  | 0.82  | 0.79  | 0.79  | 0.72  | 0.68  | 0.68  |
| v/c Ratio               |                                                                                    | 0.64  | 0.64  |       | 0.08  | 0.02  | 0.60  | 0.36  | 0.01  | 0.03  | 0.71  | 0.05  |
| Control Delay           |                                                                                    | 85.5  | 28.7  |       | 59.9  | 0.2   | 32.6  | 4.6   | 0.0   | 4.2   | 14.7  | 0.9   |
| Queue Delay             |                                                                                    | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.1   | 0.0   |
| Total Delay             |                                                                                    | 85.5  | 28.7  |       | 59.9  | 0.2   | 32.6  | 4.6   | 0.0   | 4.2   | 14.8  | 0.9   |
| LOS                     |                                                                                    | F     | C     |       | E     | A     | C     | A     | A     | A     | B     | A     |
| Approach Delay          |                                                                                    | 47.1  |       |       | 38.8  |       |       | 8.6   |       |       | 14.3  |       |
| Approach LOS            |                                                                                    | D     |       |       | D     |       |       | A     |       |       | B     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 14.9

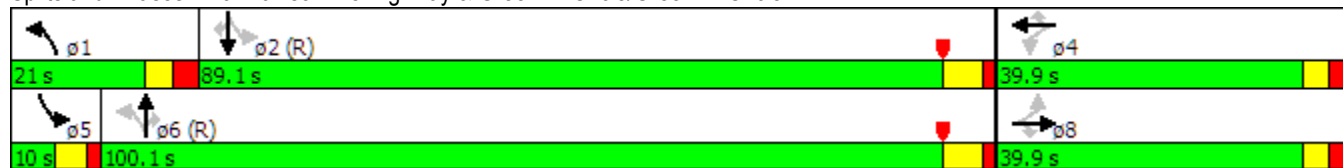
Intersection LOS: B

Intersection Capacity Utilization 78.2%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle



## Lanier Tract DRI

## 10: Dawsonville Highway &amp; Shallowford Rd/Best Buy

phase one a.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 160                                                                               | 2                                                                                 | 9                                                                                 | 2                                                                                 | 4                                                                                 | 3                                                                                 | 11                                                                                  | 847                                                                                 | 14                                                                                  | 1                                                                                   | 1415                                                                                | 386                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | -1%                                                                               |                                                                                   |                                                                                   | 10%                                                                               |                                                                                   |                                                                                     | -4%                                                                                 |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 350                                                                               |                                                                                   | 350                                                                               | 0                                                                                 |                                                                                   | 0                                                                                 | 350                                                                                 |                                                                                     | 150                                                                                 | 265                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 100                                                                               |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             | 0.953                                                                             |                                                                                   |                                                                                   | 0.982                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1723                                                                              | 1729                                                                              | 1623                                                                              | 0                                                                                 | 1773                                                                              | 1534                                                                              | 1841                                                                                | 3646                                                                                | 1647                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             | 0.953                                                                             |                                                                                   |                                                                                   | 0.982                                                                             |                                                                                   | 0.117                                                                               |                                                                                     |                                                                                     | 0.280                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1723                                                                              | 1729                                                                              | 1623                                                                              | 0                                                                                 | 1773                                                                              | 1534                                                                              | 227                                                                                 | 3646                                                                                | 1647                                                                                | 535                                                                                 | 3592                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 113                                                                               |                                                                                   |                                                                                   | 119                                                                               |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     | 220                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 653                                                                               |                                                                                   |                                                                                   | 178                                                                               |                                                                                   |                                                                                     | 957                                                                                 |                                                                                     |                                                                                     | 778                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 9.9                                                                               |                                                                                   |                                                                                   | 4.9                                                                               |                                                                                   |                                                                                     | 14.5                                                                                |                                                                                     |                                                                                     | 11.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.84                                                                              | 0.84                                                                              | 0.84                                                                              | 0.56                                                                              | 0.56                                                                              | 0.56                                                                              | 0.83                                                                                | 0.83                                                                                | 0.83                                                                                | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 190                                                                               | 2                                                                                 | 11                                                                                | 4                                                                                 | 7                                                                                 | 5                                                                                 | 13                                                                                  | 1020                                                                                | 17                                                                                  | 1                                                                                   | 1522                                                                                | 415                                                                                 |
| Shared Lane Traffic (%)    | 49%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 97                                                                                | 95                                                                                | 11                                                                                | 0                                                                                 | 11                                                                                | 5                                                                                 | 13                                                                                  | 1020                                                                                | 17                                                                                  | 1                                                                                   | 1522                                                                                | 415                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 0.99                                                                              | 0.99                                                                              | 0.99                                                                              | 1.07                                                                              | 1.07                                                                              | 1.07                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Split                                                                             | NA                                                                                | Perm                                                                              | Split                                                                             | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | Perm                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 3                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 3                                                                                 | 3                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 36.7                                                                              | 36.7                                                                              | 36.7                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                                | 28.8                                                                                | 28.8                                                                                | 30.8                                                                                | 30.8                                                                                | 30.8                                                                                |

# Lanier Tract DRI

## 10: Dawsonville Highway & Shallowford Rd/Best Buy

phase one a.m.



| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Total Split (s)         | 36.7  | 36.7  | 36.7  | 38.9  | 38.9  | 38.9  | 10.8  | 74.4  | 74.4  | 63.6  | 63.6  | 63.6  |
| Total Split (%)         | 24.5% | 24.5% | 24.5% | 25.9% | 25.9% | 25.9% | 7.2%  | 49.6% | 49.6% | 42.4% | 42.4% | 42.4% |
| Maximum Green (s)       | 30.0  | 30.0  | 30.0  | 33.0  | 33.0  | 33.0  | 5.0   | 67.6  | 67.6  | 56.8  | 56.8  | 56.8  |
| Yellow Time (s)         | 4.5   | 4.5   | 4.5   | 3.0   | 3.0   | 3.0   | 3.0   | 4.9   | 4.9   | 4.9   | 4.9   | 4.9   |
| All-Red Time (s)        | 2.2   | 2.2   | 2.2   | 2.9   | 2.9   | 2.9   | 2.8   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.7   | 6.7   | 6.7   |       | 5.9   | 5.9   | 5.8   | 6.8   | 6.8   | 6.8   | 6.8   | 6.8   |
| Lead/Lag                | Lead  | Lead  | Lead  | Lag   | Lag   | Lag   | Lead  |       |       | Lag   | Lag   | Lag   |
| Lead-Lag Optimize?      | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |       |       | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None  | None  | None  | None  | None  | None  | None  | C-Min | C-Min | C-Min | C-Min | C-Min |
| Walk Time (s)           | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 26.0  | 26.0  | 26.0  | 29.0  | 29.0  | 29.0  |       | 18.0  | 18.0  | 20.0  | 20.0  | 20.0  |
| Pedestrian Calls (#/hr) | 0     | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     | 0     | 0     | 0     |
| Act Effect Green (s)    | 13.8  | 13.8  | 13.8  |       | 6.5   | 6.5   | 118.3 | 117.3 | 117.3 | 112.5 | 112.5 | 112.5 |
| Actuated g/C Ratio      | 0.09  | 0.09  | 0.09  |       | 0.04  | 0.04  | 0.79  | 0.78  | 0.78  | 0.75  | 0.75  | 0.75  |
| v/c Ratio               | 0.61  | 0.60  | 0.04  |       | 0.14  | 0.03  | 0.05  | 0.36  | 0.01  | 0.00  | 0.56  | 0.33  |
| Control Delay           | 81.4  | 80.4  | 0.3   |       | 72.5  | 0.3   | 6.0   | 6.3   | 0.0   | 7.0   | 11.2  | 4.5   |
| Queue Delay             | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.4   | 0.0   |
| Total Delay             | 81.4  | 80.4  | 0.3   |       | 72.5  | 0.3   | 6.0   | 6.3   | 0.0   | 7.0   | 11.7  | 4.5   |
| LOS                     | F     | F     | A     |       | E     | A     | A     | A     | A     | A     | B     | A     |
| Approach Delay          |       | 76.5  |       |       | 49.9  |       |       | 6.2   |       |       | 10.1  |       |
| Approach LOS            |       | E     |       |       | D     |       |       | A     |       |       | B     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 45 (30%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.61

Intersection Signal Delay: 13.3

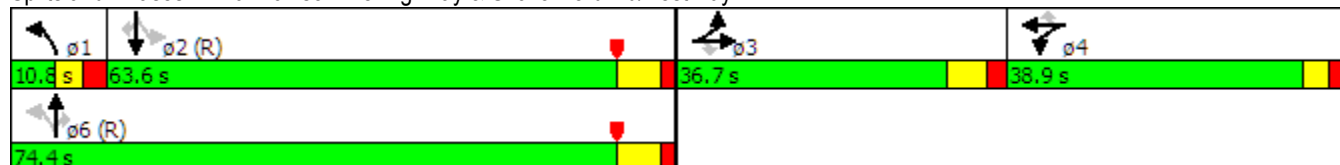
Intersection LOS: B

Intersection Capacity Utilization 63.6%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 10: Dawsonville Highway & Shallowford Rd/Best Buy



Lanier Tract DRI  
1: Sportsman Club Road & Strickland Drive

phase one p.m.

| Intersection             |        |       |        |      |        |           |
|--------------------------|--------|-------|--------|------|--------|-----------|
| Int Delay, s/veh         | 3.2    |       |        |      |        |           |
|                          |        |       |        |      |        |           |
| Movement                 | WBL    | WBR   |        | NBT  | NBR    | SBL SBT   |
| Vol, veh/h               | 24     | 0     |        | 32   | 28     | 0 25      |
| Conflicting Peds, #/hr   | 0      | 0     |        | 0    | 0      | 0 0       |
| Sign Control             | Stop   | Stop  |        | Free | Free   | Free Free |
| RT Channelized           | -      | None  |        | -    | None   | - None    |
| Storage Length           | 0      | -     |        | -    | -      | - -       |
| Veh in Median Storage, # | 0      | -     |        | 0    | -      | - 0       |
| Grade, %                 | 0      | -     |        | 0    | -      | - 0       |
| Peak Hour Factor         | 44     | 44    |        | 86   | 86     | 82 82     |
| Heavy Vehicles, %        | 2      | 2     |        | 2    | 2      | 2 2       |
| Mvmt Flow                | 55     | 0     |        | 37   | 33     | 0 30      |
|                          |        |       |        |      |        |           |
| Major/Minor              | Minor1 |       | Major1 |      | Major2 |           |
| Conflicting Flow All     | 83     | 53    |        | 0    | 0      | 70 0      |
| Stage 1                  | 53     | -     |        | -    | -      | - -       |
| Stage 2                  | 30     | -     |        | -    | -      | - -       |
| Critical Hdwy            | 6.42   | 6.22  |        | -    | -      | 4.12 -    |
| Critical Hdwy Stg 1      | 5.42   | -     |        | -    | -      | - -       |
| Critical Hdwy Stg 2      | 5.42   | -     |        | -    | -      | - -       |
| Follow-up Hdwy           | 3.518  | 3.318 |        | -    | -      | 2.218 -   |
| Pot Cap-1 Maneuver       | 919    | 1014  |        | -    | -      | 1531 -    |
| Stage 1                  | 970    | -     |        | -    | -      | - -       |
| Stage 2                  | 993    | -     |        | -    | -      | - -       |
| Platoon blocked, %       |        |       |        | -    | -      | -         |
| Mov Cap-1 Maneuver       | 919    | 1014  |        | -    | -      | 1531 -    |
| Mov Cap-2 Maneuver       | 919    | -     |        | -    | -      | - -       |
| Stage 1                  | 970    | -     |        | -    | -      | - -       |
| Stage 2                  | 993    | -     |        | -    | -      | - -       |
|                          |        |       |        |      |        |           |
| Approach                 | WB     |       | NB     |      | SB     |           |
| HCM Control Delay, s     | 9.2    |       | 0      |      | 0      |           |
| HCM LOS                  | A      |       |        |      |        |           |
|                          |        |       |        |      |        |           |
| Minor Lane/Major Mvmt    | NBT    | NBR   | WBLn1  | SBL  | SBT    |           |
| Capacity (veh/h)         | -      | -     | 919    | 1531 | -      |           |
| HCM Lane V/C Ratio       | -      | -     | 0.059  | -    | -      |           |
| HCM Control Delay (s)    | -      | -     | 9.2    | 0    | -      |           |
| HCM Lane LOS             | -      | -     | A      | A    | -      |           |
| HCM 95th %tile Q(veh)    | -      | -     | 0.2    | 0    | -      |           |

Lanier Tract DRI  
2: GA 53 & Sportsman Club Road

phase one p.m.

| Intersection                                                                                                         |        |       |      |        |       |      |        |           |      |           |      |      |
|----------------------------------------------------------------------------------------------------------------------|--------|-------|------|--------|-------|------|--------|-----------|------|-----------|------|------|
| Int Delay, s/veh                                                                                                     | 74.4   |       |      |        |       |      |        |           |      |           |      |      |
|                                                                                                                      |        |       |      |        |       |      |        |           |      |           |      |      |
| Movement                                                                                                             | EBL    | EBT   | EBR  | WBL    | WBT   | WBR  | NBL    | NBT       | NBR  | SBL       | SBT  | SBR  |
| Vol, veh/h                                                                                                           | 22     | 1166  | 0    | 26     | 1878  | 34   | 0      | 0         | 0    | 42        | 0    | 23   |
| Conflicting Peds, #/hr                                                                                               | 0      | 0     | 0    | 0      | 0     | 0    | 0      | 0         | 0    | 0         | 0    | 0    |
| Sign Control                                                                                                         | Free   | Free  | Free | Free   | Free  | Free | Stop   | Stop      | Stop | Stop      | Stop | Stop |
| RT Channelized                                                                                                       | -      | -     | None | -      | -     | None | -      | -         | None | -         | -    | None |
| Storage Length                                                                                                       | 0      | -     | -    | 0      | -     | -    | -      | -         | -    | -         | -    | -    |
| Veh in Median Storage, #                                                                                             | -      | 0     | -    | -      | 0     | -    | -      | 0         | -    | -         | 0    | -    |
| Grade, %                                                                                                             | -      | 0     | -    | -      | 0     | -    | -      | 0         | -    | -         | 0    | -    |
| Peak Hour Factor                                                                                                     | 95     | 95    | 95   | 96     | 96    | 96   | 92     | 92        | 92   | 75        | 75   | 75   |
| Heavy Vehicles, %                                                                                                    | 2      | 2     | 2    | 2      | 2     | 2    | 2      | 2         | 2    | 2         | 2    | 2    |
| Mvmt Flow                                                                                                            | 23     | 1227  | 0    | 27     | 1956  | 35   | 0      | 0         | 0    | 56        | 0    | 31   |
|                                                                                                                      |        |       |      |        |       |      |        |           |      |           |      |      |
| Major/Minor                                                                                                          | Major1 |       |      | Major2 |       |      | Minor1 |           |      | Minor2    |      |      |
| Conflicting Flow All                                                                                                 | 1992   | 0     | 0    | 1227   | 0     | 0    | 2306   | 3320      | 614  | 2688      | 3302 | 996  |
| Stage 1                                                                                                              | -      | -     | -    | -      | -     | -    | 1274   | 1274      | -    | 2028      | 2028 | -    |
| Stage 2                                                                                                              | -      | -     | -    | -      | -     | -    | 1032   | 2046      | -    | 660       | 1274 | -    |
| Critical Hdwy                                                                                                        | 4.14   | -     | -    | 4.14   | -     | -    | 7.54   | 6.54      | 6.94 | 7.54      | 6.54 | 6.94 |
| Critical Hdwy Stg 1                                                                                                  | -      | -     | -    | -      | -     | -    | 6.54   | 5.54      | -    | 6.54      | 5.54 | -    |
| Critical Hdwy Stg 2                                                                                                  | -      | -     | -    | -      | -     | -    | 6.54   | 5.54      | -    | 6.54      | 5.54 | -    |
| Follow-up Hdwy                                                                                                       | 2.22   | -     | -    | 2.22   | -     | -    | 3.52   | 4.02      | 3.32 | 3.52      | 4.02 | 3.32 |
| Pot Cap-1 Maneuver                                                                                                   | 285    | -     | -    | 564    | -     | -    | 21     | 8         | 435  | ~ 10      | 8    | 243  |
| Stage 1                                                                                                              | -      | -     | -    | -      | -     | -    | 177    | 236       | -    | 59        | 100  | -    |
| Stage 2                                                                                                              | -      | -     | -    | -      | -     | -    | 249    | 98        | -    | 418       | 236  | -    |
| Platoon blocked, %                                                                                                   |        | -     | -    |        | -     | -    |        |           |      |           |      |      |
| Mov Cap-1 Maneuver                                                                                                   | 285    | -     | -    | 564    | -     | -    | 17     | 7         | 435  | ~ 9       | 7    | 243  |
| Mov Cap-2 Maneuver                                                                                                   | -      | -     | -    | -      | -     | -    | 17     | 7         | -    | ~ 9       | 7    | -    |
| Stage 1                                                                                                              | -      | -     | -    | -      | -     | -    | 163    | 217       | -    | ~ 54      | 95   | -    |
| Stage 2                                                                                                              | -      | -     | -    | -      | -     | -    | 207    | 93        | -    | 384       | 217  | -    |
|                                                                                                                      |        |       |      |        |       |      |        |           |      |           |      |      |
| Approach                                                                                                             | EB     |       |      | WB     |       |      | NB     |           |      | SB        |      |      |
| HCM Control Delay, s                                                                                                 | 0.3    |       |      | 0.2    |       |      | 0      |           |      | \$ 2872.3 |      |      |
| HCM LOS                                                                                                              |        |       |      |        |       |      | A      |           |      | F         |      |      |
|                                                                                                                      |        |       |      |        |       |      |        |           |      |           |      |      |
| Minor Lane/Major Mvmt                                                                                                | NBLn1  | EBL   | EBT  | EBR    | WBL   | WBT  | WBR    | SBLn1     |      |           |      |      |
| Capacity (veh/h)                                                                                                     | -      | 285   | -    | -      | 564   | -    | -      | 14        |      |           |      |      |
| HCM Lane V/C Ratio                                                                                                   | -      | 0.081 | -    | -      | 0.048 | -    | -      | 6.19      |      |           |      |      |
| HCM Control Delay (s)                                                                                                | 0      | 18.7  | -    | -      | 11.7  | -    |        | \$ 2872.3 |      |           |      |      |
| HCM Lane LOS                                                                                                         | A      | C     | -    | -      | B     | -    | -      | F         |      |           |      |      |
| HCM 95th %tile Q(veh)                                                                                                | -      | 0.3   | -    | -      | 0.2   | -    | -      | 11.8      |      |           |      |      |
| Notes                                                                                                                |        |       |      |        |       |      |        |           |      |           |      |      |
| ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |        |       |      |        |       |      |        |           |      |           |      |      |

Lanier Tract DRI  
3: Avonlea Way & GA 53

phase one p.m.

| Intersection                                                                                                         |        |      |      |          |        |       |        |       |      |        |      |      |
|----------------------------------------------------------------------------------------------------------------------|--------|------|------|----------|--------|-------|--------|-------|------|--------|------|------|
| Int Delay, s/veh                                                                                                     | 4.2    |      |      |          |        |       |        |       |      |        |      |      |
|                                                                                                                      |        |      |      |          |        |       |        |       |      |        |      |      |
| Movement                                                                                                             | EBL    | EBT  | EBR  | WBL      | WBT    | WBR   | NBL    | NBT   | NBR  | SBL    | SBT  | SBR  |
| Vol, veh/h                                                                                                           | 12     | 0    | 52   | 2        | 0      | 11    | 68     | 1858  | 17   | 10     | 1263 | 15   |
| Conflicting Peds, #/hr                                                                                               | 0      | 0    | 0    | 0        | 0      | 0     | 0      | 0     | 0    | 0      | 0    | 0    |
| Sign Control                                                                                                         | Stop   | Stop | Stop | Stop     | Stop   | Stop  | Free   | Free  | Free | Free   | Free | Free |
| RT Channelized                                                                                                       | -      | -    | None | -        | -      | None  | -      | -     | None | -      | -    | None |
| Storage Length                                                                                                       | 0      | -    | 0    | 0        | -      | 0     | 0      | -     | -    | 0      | -    | 0    |
| Veh in Median Storage, #                                                                                             | -      | 0    | -    | -        | 0      | -     | -      | 0     | -    | -      | 0    | -    |
| Grade, %                                                                                                             | -      | 0    | -    | -        | 0      | -     | -      | 0     | -    | -      | 0    | -    |
| Peak Hour Factor                                                                                                     | 76     | 76   | 76   | 80       | 80     | 80    | 95     | 95    | 95   | 100    | 100  | 100  |
| Heavy Vehicles, %                                                                                                    | 2      | 2    | 2    | 2        | 2      | 2     | 2      | 2     | 2    | 2      | 2    | 2    |
| Mvmt Flow                                                                                                            | 16     | 0    | 68   | 2        | 0      | 14    | 72     | 1956  | 18   | 10     | 1263 | 15   |
|                                                                                                                      |        |      |      |          |        |       |        |       |      |        |      |      |
| Major/Minor                                                                                                          | Minor2 |      |      | Minor1   |        |       | Major1 |       |      | Major2 |      |      |
| Conflicting Flow All                                                                                                 | 2404   | 3400 | 632  | 2760     | 3391   | 987   | 1263   | 0     | 0    | 1974   | 0    | 0    |
| Stage 1                                                                                                              | 1283   | 1283 | -    | 2108     | 2108   | -     | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 1121   | 2117 | -    | 652      | 1283   | -     | -      | -     | -    | -      | -    | -    |
| Critical Hdwy                                                                                                        | 7.54   | 6.54 | 6.94 | 7.54     | 6.54   | 6.94  | 4.14   | -     | -    | 4.14   | -    | -    |
| Critical Hdwy Stg 1                                                                                                  | 6.54   | 5.54 | -    | 6.54     | 5.54   | -     | -      | -     | -    | -      | -    | -    |
| Critical Hdwy Stg 2                                                                                                  | 6.54   | 5.54 | -    | 6.54     | 5.54   | -     | -      | -     | -    | -      | -    | -    |
| Follow-up Hdwy                                                                                                       | 3.52   | 4.02 | 3.32 | 3.52     | 4.02   | 3.32  | 2.22   | -     | -    | 2.22   | -    | -    |
| Pot Cap-1 Maneuver                                                                                                   | 17     | 7    | 423  | 9        | 7      | 246   | 546    | -     | -    | 290    | -    | -    |
| Stage 1                                                                                                              | 175    | 234  | -    | 52       | 91     | -     | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 220    | 90   | -    | 423      | 234    | -     | -      | -     | -    | -      | -    | -    |
| Platoon blocked, %                                                                                                   |        |      |      |          |        |       |        | -     | -    |        | -    | -    |
| Mov Cap-1 Maneuver                                                                                                   | ~ 14   | 6    | 423  | 7        | 6      | 246   | 546    | -     | -    | 290    | -    | -    |
| Mov Cap-2 Maneuver                                                                                                   | ~ 14   | 6    | -    | 7        | 6      | -     | -      | -     | -    | -      | -    | -    |
| Stage 1                                                                                                              | 152    | 226  | -    | 45       | 79     | -     | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 180    | 78   | -    | 342      | 226    | -     | -      | -     | -    | -      | -    | -    |
|                                                                                                                      |        |      |      |          |        |       |        |       |      |        |      |      |
| Approach                                                                                                             | EB     |      |      | WB       |        |       | NB     |       |      | SB     |      |      |
| HCM Control Delay, s                                                                                                 | 134.8  |      |      | 124.5    |        |       | 0.4    |       |      | 0.1    |      |      |
| HCM LOS                                                                                                              | F      |      |      | F        |        |       |        |       |      |        |      |      |
|                                                                                                                      |        |      |      |          |        |       |        |       |      |        |      |      |
| Minor Lane/Major Mvmt                                                                                                | NBL    | NBT  | NBR  | EBLn1    | EBLn2  | WBLn1 | WBLn2  | SBL   | SBT  | SBR    |      |      |
| Capacity (veh/h)                                                                                                     | 546    | -    | -    | 14       | 423    | 7     | 246    | 290   | -    | -      |      |      |
| HCM Lane V/C Ratio                                                                                                   | 0.131  | -    | -    | 1.128    | 0.162  | 0.357 | 0.056  | 0.034 | -    | -      |      |      |
| HCM Control Delay (s)                                                                                                | 12.6   | -    | -    | \$ 653.3 | 15.1\$ | 696.5 | 20.5   | 17.9  | -    | -      |      |      |
| HCM Lane LOS                                                                                                         | B      | -    | -    | F        | C      | F     | C      | C     | -    | -      |      |      |
| HCM 95th %tile Q(veh)                                                                                                | 0.4    | -    | -    | 2.5      | 0.6    | 0.7   | 0.2    | 0.1   | -    | -      |      |      |
| Notes                                                                                                                |        |      |      |          |        |       |        |       |      |        |      |      |
| ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |        |      |      |          |        |       |        |       |      |        |      |      |

Lanier Tract DRI  
4: Canterbury Road & GA 53

phase one p.m.

| Intersection     |     |  |  |  |  |  |  |  |  |  |  |  |
|------------------|-----|--|--|--|--|--|--|--|--|--|--|--|
| Int Delay, s/veh | 3.8 |  |  |  |  |  |  |  |  |  |  |  |

| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol, veh/h               | 8    | 0    | 31   | 2    | 0    | 2    | 123  | 1908 | 4    | 3    | 1268 | 15   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | 0    | -    | 0    | 0    | -    | 0    | 0    | -    | -    | 0    | -    | 0    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 80   | 80   | 80   | 70   | 70   | 70   | 96   | 96   | 96   | 96   | 96   | 96   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 10   | 0    | 39   | 3    | 0    | 3    | 128  | 1988 | 4    | 3    | 1321 | 16   |

| Major/Minor          | Minor2 |      |      | Minor1 |      |      | Major1 |   |   | Major2 |   |   |
|----------------------|--------|------|------|--------|------|------|--------|---|---|--------|---|---|
| Conflicting Flow All | 2577   | 3575 | 660  | 2913   | 3573 | 996  | 1321   | 0 | 0 | 1992   | 0 | 0 |
| Stage 1              | 1327   | 1327 | -    | 2246   | 2246 | -    | -      | - | - | -      | - | - |
| Stage 2              | 1250   | 2248 | -    | 667    | 1327 | -    | -      | - | - | -      | - | - |
| Critical Hdwy        | 7.54   | 6.54 | 6.94 | 7.54   | 6.54 | 6.94 | 4.14   | - | - | 4.14   | - | - |
| Critical Hdwy Stg 1  | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    | -      | - | - | -      | - | - |
| Critical Hdwy Stg 2  | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    | -      | - | - | -      | - | - |
| Follow-up Hdwy       | 3.52   | 4.02 | 3.32 | 3.52   | 4.02 | 3.32 | 2.22   | - | - | 2.22   | - | - |
| Pot Cap-1 Maneuver   | 13     | 6    | 406  | 7      | 6    | 243  | 519    | - | - | 285    | - | - |
| Stage 1              | 164    | 223  | -    | 43     | 77   | -    | -      | - | - | -      | - | - |
| Stage 2              | 183    | 77   | -    | 414    | 223  | -    | -      | - | - | -      | - | - |
| Platoon blocked, %   |        |      |      |        |      |      |        | - | - |        | - | - |
| Mov Cap-1 Maneuver   | 10     | 4    | 406  | 5      | 4    | 243  | 519    | - | - | 285    | - | - |
| Mov Cap-2 Maneuver   | 10     | 4    | -    | 5      | 4    | -    | -      | - | - | -      | - | - |
| Stage 1              | 124    | 221  | -    | 32     | 58   | -    | -      | - | - | -      | - | - |
| Stage 2              | 136    | 58   | -    | 371    | 221  | -    | -      | - | - | -      | - | - |

| Approach             | EB    | WB       | NB  | SB |
|----------------------|-------|----------|-----|----|
| HCM Control Delay, s | 169.2 | \$ 544.8 | 0.9 | 0  |
| HCM LOS              | F     | F        |     |    |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1    | EBLn2 | WBLn1     | WBLn2 | SBL   | SBT | SBR |
|-----------------------|-------|-----|-----|----------|-------|-----------|-------|-------|-----|-----|
| Capacity (veh/h)      | 519   | -   | -   | 10       | 406   | 5         | 243   | 285   | -   | -   |
| HCM Lane V/C Ratio    | 0.247 | -   | -   | 1        | 0.095 | 0.571     | 0.012 | 0.011 | -   | -   |
| HCM Control Delay (s) | 14.2  | -   | -   | \$ 767.5 | 14.2  | \$ 1069.5 | 20    | 17.8  | -   | -   |
| HCM Lane LOS          | B     | -   | -   | F        | B     | F         | C     | C     | -   | -   |
| HCM 95th %tile Q(veh) | 1     | -   | -   | 1.9      | 0.3   | 0.9       | 0     | 0     | -   | -   |

| Notes                      |                        |                            |                                |  |  |  |  |  |  |  |
|----------------------------|------------------------|----------------------------|--------------------------------|--|--|--|--|--|--|--|
| ~: Volume exceeds capacity | \$: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |  |  |  |  |  |  |  |



| Intersection             |        |        |       |        |      |      |
|--------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh         | 0.9    |        |       |        |      |      |
| Movement                 | EBL    | EBR    | NBL   | NBT    | SBT  | SBR  |
| Vol, veh/h               | 1      | 52     | 95    | 2325   | 1629 | 10   |
| Conflicting Peds, #/hr   | 0      | 0      | 0     | 0      | 0    | 0    |
| Sign Control             | Stop   | Stop   | Free  | Free   | Free | Free |
| RT Channelized           | -      | Yield  | -     | Yield  | -    | None |
| Storage Length           | 0      | 0      | 200   | -      | -    | 360  |
| Veh in Median Storage, # | 0      | -      | -     | 0      | 0    | -    |
| Grade, %                 | 0      | -      | -     | 1      | 0    | -    |
| Peak Hour Factor         | 71     | 71     | 99    | 99     | 98   | 98   |
| Heavy Vehicles, %        | 0      | 0      | 0     | 0      | 1    | 0    |
| Mvmt Flow                | 1      | 73     | 96    | 2348   | 1662 | 10   |
| Major/Minor              | Minor2 | Major1 |       | Major2 |      |      |
| Conflicting Flow All     | 3028   | 832    | 1662  | 0      | -    | 0    |
| Stage 1                  | 1662   | -      | -     | -      | -    | -    |
| Stage 2                  | 1366   | -      | -     | -      | -    | -    |
| Critical Hdwy            | 6.8    | 6.9    | 4.1   | -      | -    | -    |
| Critical Hdwy Stg 1      | 5.8    | -      | -     | -      | -    | -    |
| Critical Hdwy Stg 2      | 5.8    | -      | -     | -      | -    | -    |
| Follow-up Hdwy           | 3.5    | 3.3    | 2.2   | -      | -    | -    |
| Pot Cap-1 Maneuver       | 10     | 316    | 393   | -      | -    | -    |
| Stage 1                  | 143    | -      | -     | -      | -    | -    |
| Stage 2                  | 206    | -      | -     | -      | -    | -    |
| Platoon blocked, %       |        |        |       | -      | -    | -    |
| Mov Cap-1 Maneuver       | 8      | 316    | 393   | -      | -    | -    |
| Mov Cap-2 Maneuver       | 8      | -      | -     | -      | -    | -    |
| Stage 1                  | 143    | -      | -     | -      | -    | -    |
| Stage 2                  | 156    | -      | -     | -      | -    | -    |
| Approach                 | EB     | NB     |       | SB     |      |      |
| HCM Control Delay, s     | 29.5   | 0.7    |       | 0      |      |      |
| HCM LOS                  | D      |        |       |        |      |      |
| Minor Lane/Major Mvmt    | NBL    | NBT    | EBLn1 | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)         | 393    | -      | 8     | 316    | -    | -    |
| HCM Lane V/C Ratio       | 0.244  | -      | 0.176 | 0.232  | -    | -    |
| HCM Control Delay (s)    | 17.1   | -      | 534.2 | 19.8   | -    | -    |
| HCM Lane LOS             | C      | -      | F     | C      | -    | -    |
| HCM 95th %tile Q(veh)    | 0.9    | -      | 0.4   | 0.9    | -    | -    |

## Lanier Tract DRI

## 5: GA 53 &amp; Lanier Valley Dr/Ahaluna Dr

phase one p.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Volume (vph)               | 23                                                                                | 1                                                                                 | 106                                                                               | 98                                                                                | 8                                                                                 | 64                                                                                | 198                                                                                 | 1965                                                                                | 114                                                                                 | 31                                                                                  | 1366                                                                                | 3                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 2%                                                                                |                                                                                   |                                                                                   | -4%                                                                               |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 100                                                                                 |                                                                                     | 0                                                                                   | 140                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.890                                                                             |                                                                                   |                                                                                   | 0.949                                                                             |                                                                                   |                                                                                     | 0.992                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   | 0.991                                                                             |                                                                                   |                                                                                   | 0.972                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1659                                                                              | 0                                                                                 | 0                                                                                 | 1788                                                                              | 0                                                                                 | 1796                                                                                | 3563                                                                                | 0                                                                                   | 1814                                                                                | 3592                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.906                                                                             |                                                                                   |                                                                                   | 0.613                                                                             |                                                                                   | 0.117                                                                               |                                                                                     |                                                                                     | 0.049                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1517                                                                              | 0                                                                                 | 0                                                                                 | 1127                                                                              | 0                                                                                 | 221                                                                                 | 3563                                                                                | 0                                                                                   | 94                                                                                  | 3592                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 119                                                                               |                                                                                   |                                                                                   | 17                                                                                |                                                                                   |                                                                                     | 10                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 340                                                                               |                                                                                   |                                                                                   | 322                                                                               |                                                                                   |                                                                                     | 1002                                                                                |                                                                                     |                                                                                     | 1457                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.7                                                                               |                                                                                   |                                                                                   | 7.3                                                                               |                                                                                   |                                                                                     | 15.2                                                                                |                                                                                     |                                                                                     | 22.1                                                                                |                                                                                     |
| Peak Hour Factor           | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 26                                                                                | 1                                                                                 | 119                                                                               | 109                                                                               | 9                                                                                 | 71                                                                                | 206                                                                                 | 2047                                                                                | 119                                                                                 | 32                                                                                  | 1423                                                                                | 3                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 146                                                                               | 0                                                                                 | 0                                                                                 | 189                                                                               | 0                                                                                 | 206                                                                                 | 2166                                                                                | 0                                                                                   | 32                                                                                  | 1426                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 |                                                                                     | 0                                                                                   | 336                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   |                                                                                     | 0                                                                                   | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 8                                                                                 | 8                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 10.6                                                                                | 23.0                                                                                |                                                                                     | 23.0                                                                                | 23.0                                                                                |                                                                                     |

# Lanier Tract DRI

## 5: GA 53 & Lanier Valley Dr/Ahaluna Dr

phase one p.m.

|                       |  |       |     |       |       |     |       |       |     |       |       |     |
|-----------------------|------------------------------------------------------------------------------------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Lane Group            | EBL                                                                                | EBT   | EBR | WBL   | WBT   | WBR | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
| Total Split (s)       | 37.0                                                                               | 37.0  |     | 37.0  | 37.0  |     | 21.2  | 123.0 |     | 101.8 | 101.8 |     |
| Total Split (%)       | 23.1%                                                                              | 23.1% |     | 23.1% | 23.1% |     | 13.3% | 76.9% |     | 63.6% | 63.6% |     |
| Maximum Green (s)     | 30.4                                                                               | 30.4  |     | 30.4  | 30.4  |     | 15.6  | 116.9 |     | 95.7  | 95.7  |     |
| Yellow Time (s)       | 4.0                                                                                | 4.0   |     | 4.0   | 4.0   |     | 3.0   | 4.5   |     | 4.5   | 4.5   |     |
| All-Red Time (s)      | 2.6                                                                                | 2.6   |     | 2.6   | 2.6   |     | 2.6   | 1.6   |     | 1.6   | 1.6   |     |
| Lost Time Adjust (s)  |                                                                                    | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Lost Time (s)   |                                                                                    | 6.6   |     |       | 6.6   |     | 5.6   | 6.1   |     | 6.1   | 6.1   |     |
| Lead/Lag              |                                                                                    |       |     |       |       |     | Lead  |       |     | Lag   | Lag   |     |
| Lead-Lag Optimize?    |                                                                                    |       |     |       |       |     | Yes   |       |     | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0                                                                                | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode           | None                                                                               | None  |     | None  | None  |     | None  | C-Max |     | C-Max | C-Max |     |
| Act Effect Green (s)  |                                                                                    | 27.1  |     |       | 27.1  |     | 120.7 | 120.2 |     | 102.6 | 102.6 |     |
| Actuated g/C Ratio    |                                                                                    | 0.17  |     |       | 0.17  |     | 0.75  | 0.75  |     | 0.64  | 0.64  |     |
| v/c Ratio             |                                                                                    | 0.41  |     |       | 0.92  |     | 0.73  | 0.81  |     | 0.53  | 0.62  |     |
| Control Delay         |                                                                                    | 17.5  |     |       | 104.1 |     | 30.2  | 14.3  |     | 56.7  | 19.5  |     |
| Queue Delay           |                                                                                    | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay           |                                                                                    | 17.5  |     |       | 104.1 |     | 30.2  | 14.3  |     | 56.7  | 19.5  |     |
| LOS                   |                                                                                    | B     |     |       | F     |     | C     | B     |     | E     | B     |     |
| Approach Delay        |                                                                                    | 17.5  |     |       | 104.1 |     |       | 15.7  |     |       | 20.4  |     |
| Approach LOS          |                                                                                    | B     |     |       | F     |     |       | B     |     |       | C     |     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 129 (81%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.92

Intersection Signal Delay: 21.4

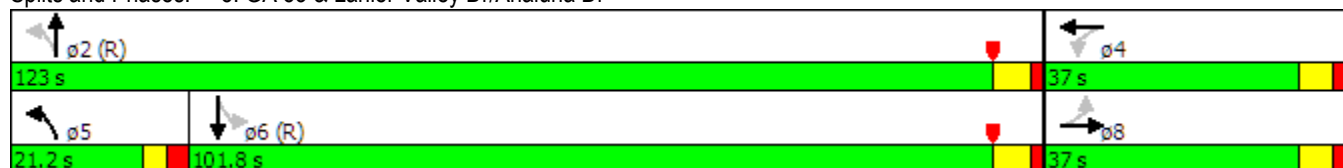
Intersection LOS: C

Intersection Capacity Utilization 94.2%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 5: GA 53 & Lanier Valley Dr/Ahaluna Dr



## Lanier Tract DRI

## 6: 53-Dawsonville Hwy &amp; Academy Sports

phase one p.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |  |  |  |  |  |  |  |
| Volume (vph)               | 14                                                                                | 3                                                                                 | 66                                                                                | 130                                                                               | 8                                                                                 | 46                                                                                | 96                                                                                  | 2066                                                                                | 152                                                                                 | 21                                                                                  | 1421                                                                                | 30                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 4%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 70                                                                                | 200                                                                                 |                                                                                     | 170                                                                                 | 190                                                                                 |                                                                                     | 360                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1805                                                                              | 1900                                                                              | 1615                                                                              | 1769                                                                              | 1862                                                                              | 1583                                                                              | 1796                                                                                | 3592                                                                                | 1607                                                                                | 1805                                                                                | 3574                                                                                | 1615                                                                                |
| Flt Permitted              | 0.751                                                                             |                                                                                   |                                                                                   | 0.756                                                                             |                                                                                   |                                                                                   | 0.123                                                                               |                                                                                     |                                                                                     | 0.039                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1427                                                                              | 1900                                                                              | 1615                                                                              | 1408                                                                              | 1862                                                                              | 1583                                                                              | 233                                                                                 | 3592                                                                                | 1607                                                                                | 74                                                                                  | 3574                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 69                                                                                |                                                                                   |                                                                                   | 63                                                                                |                                                                                     |                                                                                     | 66                                                                                  |                                                                                     |                                                                                     | 64                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 262                                                                               |                                                                                   |                                                                                   | 246                                                                               |                                                                                   |                                                                                     | 1836                                                                                |                                                                                     |                                                                                     | 685                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.1                                                                               |                                                                                   |                                                                                   | 6.7                                                                               |                                                                                   |                                                                                     | 27.8                                                                                |                                                                                     |                                                                                     | 10.4                                                                                |                                                                                     |
| Peak Hour Factor           | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.80                                                                              | 0.80                                                                              | 0.80                                                                              | 0.98                                                                                | 0.98                                                                                | 0.98                                                                                | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 15                                                                                | 3                                                                                 | 69                                                                                | 162                                                                               | 10                                                                                | 58                                                                                | 98                                                                                  | 2108                                                                                | 155                                                                                 | 22                                                                                  | 1465                                                                                | 31                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 15                                                                                | 3                                                                                 | 69                                                                                | 162                                                                               | 10                                                                                | 58                                                                                | 98                                                                                  | 2108                                                                                | 155                                                                                 | 22                                                                                  | 1465                                                                                | 31                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 2                                                                                   |                                                                                     | 2                                                                                   | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 42.0                                                                              | 42.0                                                                              | 42.0                                                                              | 42.4                                                                              | 42.4                                                                              | 42.4                                                                              | 11.4                                                                                | 30.3                                                                                | 30.3                                                                                | 11.0                                                                                | 29.3                                                                                | 29.3                                                                                |

Synchro 8 Report

Marc R Acampora, PE, LLC

# Lanier Tract DRI

## 6: 53-Dawsonville Hwy & Academy Sports

phase one p.m.

| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Total Split (s)         | 42.4  | 42.4  | 42.4  | 42.4  | 42.4  | 42.4  | 16.2  | 106.6 | 106.6 | 11.0  | 101.4 | 101.4 |
| Total Split (%)         | 26.5% | 26.5% | 26.5% | 26.5% | 26.5% | 26.5% | 10.1% | 66.6% | 66.6% | 6.9%  | 63.4% | 63.4% |
| Maximum Green (s)       | 36.0  | 36.0  | 36.0  | 36.0  | 36.0  | 36.0  | 9.8   | 100.4 | 100.4 | 5.0   | 95.2  | 95.2  |
| Yellow Time (s)         | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 4.3   | 4.3   | 3.0   | 4.3   | 4.3   |
| All-Red Time (s)        | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 1.9   | 1.9   | 3.0   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.2   | 6.2   | 6.0   | 6.2   | 6.2   |
| Lead/Lag                |       |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None  | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 23.0  | 23.0  | 23.0  | 32.0  | 32.0  | 32.0  |       | 20.0  | 20.0  |       | 19.0  | 19.0  |
| Pedestrian Calls (#/hr) | 0     | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    | 23.7  | 23.7  | 23.7  | 23.7  | 23.7  | 23.7  | 121.3 | 116.4 | 116.4 | 115.8 | 109.6 | 109.6 |
| Actuated g/C Ratio      | 0.15  | 0.15  | 0.15  | 0.15  | 0.15  | 0.15  | 0.76  | 0.73  | 0.73  | 0.72  | 0.68  | 0.68  |
| v/c Ratio               | 0.07  | 0.01  | 0.23  | 0.78  | 0.04  | 0.20  | 0.39  | 0.81  | 0.13  | 0.19  | 0.60  | 0.03  |
| Control Delay           | 55.8  | 53.3  | 13.0  | 89.1  | 54.6  | 11.7  | 11.7  | 16.7  | 7.3   | 10.0  | 12.0  | 0.0   |
| Queue Delay             | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.1   | 0.0   |
| Total Delay             | 55.8  | 53.3  | 13.0  | 89.1  | 54.6  | 11.7  | 11.7  | 16.7  | 7.3   | 10.0  | 12.1  | 0.0   |
| LOS                     | E     | D     | B     | F     | D     | B     | B     | B     | A     | B     | B     | A     |
| Approach Delay          |       | 21.8  |       |       | 68.1  |       |       | 15.9  |       |       | 11.8  |       |
| Approach LOS            |       | C     |       |       | E     |       |       | B     |       |       | B     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 120 (75%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 145

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 17.4

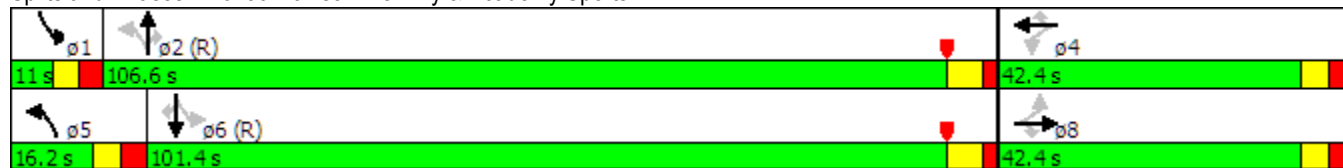
Intersection LOS: B

Intersection Capacity Utilization 90.6%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 6: 53-Dawsonville Hwy & Academy Sports



## Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 &amp; McEver Road/McEver

phase one p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |                                                                                   |   |  |  |  |  |  |
| Volume (vph)               | 967                                                                               | 235                                                                               | 426                                                                               | 96                                                                                | 100                                                                               | 93                                                                                | 478                                                                                 | 1585                                                                                | 51                                                                                  | 71                                                                                  | 1199                                                                                | 562                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 1%                                                                                |                                                                                   |                                                                                   | 5%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 180                                                                               |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 310                                                                                 |                                                                                     | 185                                                                                 | 255                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 50                                                                                |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.951                                                                             | 0.850                                                                             |                                                                                   | 0.928                                                                             |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 3484                                                                              | 1708                                                                              | 1527                                                                              | 1760                                                                              | 1719                                                                              | 0                                                                                 | 3484                                                                                | 3592                                                                                | 1607                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   | 0.468                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 3484                                                                              | 1708                                                                              | 1527                                                                              | 867                                                                               | 1719                                                                              | 0                                                                                 | 3484                                                                                | 3592                                                                                | 1607                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 18                                                                                | 308                                                                               |                                                                                   | 28                                                                                |                                                                                   |                                                                                     |                                                                                     | 172                                                                                 |                                                                                     |                                                                                     | 315                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 580                                                                               |                                                                                   |                                                                                   | 331                                                                               |                                                                                   |                                                                                     | 921                                                                                 |                                                                                     |                                                                                     | 1504                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 8.8                                                                               |                                                                                   |                                                                                   | 9.0                                                                               |                                                                                   |                                                                                     | 14.0                                                                                |                                                                                     |                                                                                     | 22.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.86                                                                              | 0.86                                                                              | 0.86                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 1018                                                                              | 247                                                                               | 448                                                                               | 112                                                                               | 116                                                                               | 108                                                                               | 493                                                                                 | 1634                                                                                | 53                                                                                  | 78                                                                                  | 1318                                                                                | 618                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   | 27%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 1018                                                                              | 368                                                                               | 327                                                                               | 112                                                                               | 224                                                                               | 0                                                                                 | 493                                                                                 | 1634                                                                                | 53                                                                                  | 78                                                                                  | 1318                                                                                | 618                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 24                                                                                |                                                                                   |                                                                                   | 24                                                                                |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                             | NA                                                                                |                                                                                   | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 8                                                                                 |                                                                                   | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 8                                                                                 | 8                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 13.2                                                                              | 50.2                                                                              | 50.2                                                                              | 11.6                                                                              | 48.2                                                                              |                                                                                   | 13.4                                                                                | 35.6                                                                                | 35.6                                                                                | 12.9                                                                                | 44.6                                                                                | 44.6                                                                                |

# Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 & McEver Road/McEver

phase one p.m.

|                         |  |       |       |      |       |     |       |       |       |      |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|------|-------|-----|-------|-------|-------|------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL  | WBT   | WBR | NBL   | NBT   | NBR   | SBL  | SBT   | SBR   |
| Total Split (s)         | 35.0                                                                               | 69.5  | 69.5  | 13.7 | 48.2  |     | 22.0  | 63.8  | 63.8  | 13.0 | 54.8  | 54.8  |
| Total Split (%)         | 21.9%                                                                              | 43.4% | 43.4% | 8.6% | 30.1% |     | 13.8% | 39.9% | 39.9% | 8.1% | 34.3% | 34.3% |
| Maximum Green (s)       | 27.7                                                                               | 62.2  | 62.2  | 7.2  | 40.9  |     | 14.5  | 57.2  | 57.2  | 5.8  | 48.2  | 48.2  |
| Yellow Time (s)         | 4.3                                                                                | 4.3   | 4.3   | 3.5  | 4.3   |     | 4.5   | 4.4   | 4.4   | 4.2  | 4.4   | 4.4   |
| All-Red Time (s)        | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 2.2   | 2.2   | 3.0  | 2.2   | 2.2   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Lost Time (s)     | 7.3                                                                                | 7.3   | 7.3   | 6.5  | 7.3   |     | 7.5   | 6.6   | 6.6   | 7.2  | 6.6   | 6.6   |
| Lead/Lag                | Lead                                                                               | Lag   | Lag   | Lead | Lag   |     | Lag   | Lag   | Lag   | Lead | Lead  | Lead  |
| Lead-Lag Optimize?      | Yes                                                                                | Yes   | Yes   | Yes  | Yes   |     | Yes   | Yes   | Yes   | Yes  | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None | None  |     | None  | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s)           |                                                                                    | 4.0   | 4.0   |      | 4.0   |     |       | 4.0   | 4.0   |      | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    | 38.0  | 38.0  |      | 36.0  |     |       | 25.0  | 25.0  |      | 34.0  | 34.0  |
| Pedestrian Calls (#/hr) |                                                                                    | 0     | 0     |      | 0     |     |       | 0     | 0     |      | 0     | 0     |
| Act Effect Green (s)    | 27.7                                                                               | 45.2  | 45.2  | 31.9 | 23.9  |     | 14.5  | 64.6  | 64.6  | 15.4 | 65.2  | 65.2  |
| Actuated g/C Ratio      | 0.17                                                                               | 0.28  | 0.28  | 0.20 | 0.15  |     | 0.09  | 0.40  | 0.40  | 0.10 | 0.41  | 0.41  |
| v/c Ratio               | 1.69                                                                               | 0.74  | 0.50  | 0.53 | 0.80  |     | 1.57  | 1.13  | 0.07  | 0.45 | 0.90  | 0.73  |
| Control Delay           | 354.5                                                                              | 58.6  | 7.9   | 46.9 | 77.3  |     | 314.1 | 120.2 | 0.1   | 67.2 | 67.6  | 40.5  |
| Queue Delay             | 0.0                                                                                | 24.1  | 1.7   | 21.7 | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Delay             | 354.5                                                                              | 82.7  | 9.6   | 68.5 | 77.3  |     | 314.1 | 120.2 | 0.1   | 67.2 | 67.6  | 40.5  |
| LOS                     | F                                                                                  | F     | A     | E    | E     |     | F     | F     | A     | E    | E     | D     |
| Approach Delay          |                                                                                    | 230.3 |       |      | 74.4  |     |       | 161.1 |       |      | 59.3  |       |
| Approach LOS            |                                                                                    | F     |       |      | E     |     |       | F     |       |      | E     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 52 (33%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.69

Intersection Signal Delay: 142.6

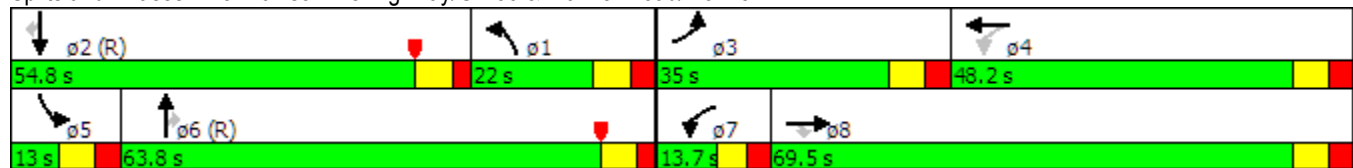
Intersection LOS: F

Intersection Capacity Utilization 110.2%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 8: Dawsonville Highway/GA 53 & McEver Road/McEver



Lanier Tract DRI

9: Dawsonville Highway & Greenhill Circle/Greenhill Circle

phase one p.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 146                                                                               | 10                                                                                | 152                                                                               | 66                                                                                | 22                                                                                | 42                                                                                | 274                                                                                 | 2012                                                                                | 77                                                                                  | 44                                                                                  | 1600                                                                                | 59                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 3%                                                                                |                                                                                   |                                                                                   | 7%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 190                                                                                 |                                                                                     | 190                                                                                 | 185                                                                                 |                                                                                     | 100                                                                                 |
| Storage Lanes              | 0                                                                                 |                                                                                   | 1                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              |                                                                                   | 0.955                                                                             |                                                                                   |                                                                                   | 0.964                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1787                                                                              | 1591                                                                              | 0                                                                                 | 1767                                                                              | 1558                                                                              | 1796                                                                                | 3592                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   | 0.591                                                                             |                                                                                   |                                                                                   | 0.482                                                                             |                                                                                   | 0.043                                                                               |                                                                                     |                                                                                     | 0.044                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1106                                                                              | 1591                                                                              | 0                                                                                 | 884                                                                               | 1558                                                                              | 81                                                                                  | 3592                                                                                | 1607                                                                                | 84                                                                                  | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 167                                                                               |                                                                                   |                                                                                   | 95                                                                                |                                                                                     |                                                                                     | 54                                                                                  |                                                                                     |                                                                                     | 95                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 288                                                                               |                                                                                   |                                                                                   | 254                                                                               |                                                                                   |                                                                                     | 778                                                                                 |                                                                                     |                                                                                     | 921                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.9                                                                               |                                                                                   |                                                                                   | 6.9                                                                               |                                                                                   |                                                                                     | 11.8                                                                                |                                                                                     |                                                                                     | 14.0                                                                                |                                                                                     |
| Peak Hour Factor           | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.78                                                                              | 0.78                                                                              | 0.78                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 160                                                                               | 11                                                                                | 167                                                                               | 85                                                                                | 28                                                                                | 54                                                                                | 282                                                                                 | 2074                                                                                | 79                                                                                  | 46                                                                                  | 1684                                                                                | 62                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 171                                                                               | 167                                                                               | 0                                                                                 | 113                                                                               | 54                                                                                | 282                                                                                 | 2074                                                                                | 79                                                                                  | 46                                                                                  | 1684                                                                                | 62                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.02                                                                              | 1.02                                                                              | 1.02                                                                              | 1.05                                                                              | 1.05                                                                              | 1.05                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              | 23.0                                                                              | 39.9                                                                              | 39.9                                                                              | 39.9                                                                              | 11.0                                                                                | 28.0                                                                                | 28.0                                                                                | 10.0                                                                                | 36.0                                                                                | 36.0                                                                                |



# Lanier Tract DRI

## 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle

phase one p.m.

|                         |  |       |       |       |       |       |       |       |       |      |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL  | SBT   | SBR   |
| Total Split (s)         | 39.9                                                                               | 39.9  | 39.9  | 39.9  | 39.9  | 39.9  | 31.0  | 110.1 | 110.1 | 10.0 | 89.1  | 89.1  |
| Total Split (%)         | 24.9%                                                                              | 24.9% | 24.9% | 24.9% | 24.9% | 24.9% | 19.4% | 68.8% | 68.8% | 6.3% | 55.7% | 55.7% |
| Maximum Green (s)       | 34.0                                                                               | 34.0  | 34.0  | 34.0  | 34.0  | 34.0  | 25.0  | 104.1 | 104.1 | 5.0  | 83.1  | 83.1  |
| Yellow Time (s)         | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 4.4   | 4.4   | 3.5  | 4.4   | 4.4   |
| All-Red Time (s)        | 2.9                                                                                | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 3.0   | 1.6   | 1.6   | 1.5  | 1.6   | 1.6   |
| Lost Time Adjust (s)    |                                                                                    | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Lost Time (s)     |                                                                                    | 5.9   | 5.9   |       | 5.9   | 5.9   | 6.0   | 6.0   | 6.0   | 5.0  | 6.0   | 6.0   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes  | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s)           |                                                                                    |       |       | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |      | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    |       |       | 30.0  | 30.0  | 30.0  |       | 18.0  | 18.0  |      | 26.0  | 26.0  |
| Pedestrian Calls (#/hr) |                                                                                    |       |       | 0     | 0     | 0     |       | 0     | 0     |      | 0     | 0     |
| Act Effect Green (s)    |                                                                                    | 28.1  | 28.1  |       | 28.1  | 28.1  | 120.0 | 111.5 | 111.5 | 96.9 | 90.3  | 90.3  |
| Actuated g/C Ratio      |                                                                                    | 0.18  | 0.18  |       | 0.18  | 0.18  | 0.75  | 0.70  | 0.70  | 0.61 | 0.56  | 0.56  |
| v/c Ratio               |                                                                                    | 0.88  | 0.40  |       | 0.73  | 0.15  | 0.90  | 0.83  | 0.07  | 0.41 | 0.83  | 0.07  |
| Control Delay           |                                                                                    | 103.0 | 9.8   |       | 87.7  | 1.7   | 57.3  | 30.1  | 5.4   | 24.1 | 57.7  | 11.5  |
| Queue Delay             |                                                                                    | 0.0   | 5.5   |       | 87.6  | 0.0   | 0.0   | 47.1  | 0.0   | 0.0  | 1.7   | 0.0   |
| Total Delay             |                                                                                    | 103.0 | 15.3  |       | 175.3 | 1.7   | 57.3  | 77.2  | 5.4   | 24.1 | 59.4  | 11.5  |
| LOS                     |                                                                                    | F     | B     |       | F     | A     | E     | E     | A     | C    | E     | B     |
| Approach Delay          |                                                                                    | 59.7  |       |       | 119.2 |       |       | 72.6  |       |      | 56.9  |       |
| Approach LOS            |                                                                                    | E     |       |       | F     |       |       | E     |       |      | E     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 67.3

Intersection LOS: E

Intersection Capacity Utilization 89.6%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle



## Lanier Tract DRI

## 10: Dawsonville Highway &amp; Shallowford Rd/Best Buy

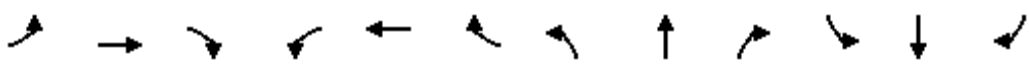
phase one p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 590                                                                               | 42                                                                                | 29                                                                                | 40                                                                                | 30                                                                                | 8                                                                                 | 44                                                                                  | 1873                                                                                | 126                                                                                 | 8                                                                                   | 1331                                                                                | 525                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | -1%                                                                               |                                                                                   |                                                                                   | 10%                                                                               |                                                                                   |                                                                                     | -4%                                                                                 |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 350                                                                               |                                                                                   | 350                                                                               | 0                                                                                 |                                                                                   | 0                                                                                 | 350                                                                                 |                                                                                     | 150                                                                                 | 265                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 100                                                                               |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             | 0.958                                                                             |                                                                                   |                                                                                   | 0.972                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1723                                                                              | 1738                                                                              | 1623                                                                              | 0                                                                                 | 1754                                                                              | 1534                                                                              | 1841                                                                                | 3682                                                                                | 1647                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             | 0.958                                                                             |                                                                                   |                                                                                   | 0.972                                                                             |                                                                                   | 0.074                                                                               |                                                                                     |                                                                                     | 0.046                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1723                                                                              | 1738                                                                              | 1623                                                                              | 0                                                                                 | 1754                                                                              | 1534                                                                              | 143                                                                                 | 3682                                                                                | 1647                                                                                | 88                                                                                  | 3628                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 106                                                                               |                                                                                   |                                                                                   | 111                                                                               |                                                                                     |                                                                                     | 65                                                                                  |                                                                                     |                                                                                     | 318                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 653                                                                               |                                                                                   |                                                                                   | 178                                                                               |                                                                                   |                                                                                     | 1046                                                                                |                                                                                     |                                                                                     | 778                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 9.9                                                                               |                                                                                   |                                                                                   | 4.9                                                                               |                                                                                   |                                                                                     | 15.8                                                                                |                                                                                     |                                                                                     | 11.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.94                                                                                | 0.94                                                                                | 0.94                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 656                                                                               | 47                                                                                | 32                                                                                | 45                                                                                | 34                                                                                | 9                                                                                 | 47                                                                                  | 1993                                                                                | 134                                                                                 | 9                                                                                   | 1463                                                                                | 577                                                                                 |
| Shared Lane Traffic (%)    | 47%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 348                                                                               | 355                                                                               | 32                                                                                | 0                                                                                 | 79                                                                                | 9                                                                                 | 47                                                                                  | 1993                                                                                | 134                                                                                 | 9                                                                                   | 1463                                                                                | 577                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 0.99                                                                              | 0.99                                                                              | 0.99                                                                              | 1.07                                                                              | 1.07                                                                              | 1.07                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Split                                                                             | NA                                                                                | Perm                                                                              | Split                                                                             | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | Perm                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 3                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 3                                                                                 | 3                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 36.7                                                                              | 36.7                                                                              | 36.7                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                                | 28.8                                                                                | 28.8                                                                                | 30.8                                                                                | 30.8                                                                                | 30.8                                                                                |

# Lanier Tract DRI

## 10: Dawsonville Highway & Shallowford Rd/Best Buy

phase one p.m.

|                         |  |       |       |       |       |       |      |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL  | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 36.7                                                                               | 36.7  | 36.7  | 38.9  | 38.9  | 38.9  | 10.8 | 84.4  | 84.4  | 73.6  | 73.6  | 73.6  |
| Total Split (%)         | 22.9%                                                                              | 22.9% | 22.9% | 24.3% | 24.3% | 24.3% | 6.8% | 52.8% | 52.8% | 46.0% | 46.0% | 46.0% |
| Maximum Green (s)       | 30.0                                                                               | 30.0  | 30.0  | 33.0  | 33.0  | 33.0  | 5.0  | 77.6  | 77.6  | 66.8  | 66.8  | 66.8  |
| Yellow Time (s)         | 4.5                                                                                | 4.5   | 4.5   | 3.0   | 3.0   | 3.0   | 3.0  | 4.9   | 4.9   | 4.9   | 4.9   | 4.9   |
| All-Red Time (s)        | 2.2                                                                                | 2.2   | 2.2   | 2.9   | 2.9   | 2.9   | 2.8  | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.7                                                                                | 6.7   | 6.7   |       | 5.9   | 5.9   | 5.8  | 6.8   | 6.8   | 6.8   | 6.8   | 6.8   |
| Lead/Lag                | Lead                                                                               | Lead  | Lead  | Lag   | Lag   | Lag   | Lead |       |       | Lag   | Lag   | Lag   |
| Lead-Lag Optimize?      | Yes                                                                                | Yes   | Yes   | Yes   | Yes   | Yes   | Yes  |       |       | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None | C-Min | C-Min | C-Min | C-Min | C-Min |
| Walk Time (s)           | 4.0                                                                                | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 26.0                                                                               | 26.0  | 26.0  | 29.0  | 29.0  | 29.0  |      | 18.0  | 18.0  | 20.0  | 20.0  | 20.0  |
| Pedestrian Calls (#/hr) | 0                                                                                  | 0     | 0     | 0     | 0     | 0     |      | 0     | 0     | 0     | 0     | 0     |
| Act Effect Green (s)    | 30.0                                                                               | 30.0  | 30.0  |       | 12.6  | 12.6  | 99.0 | 98.0  | 98.0  | 87.4  | 87.4  | 87.4  |
| Actuated g/C Ratio      | 0.19                                                                               | 0.19  | 0.19  |       | 0.08  | 0.08  | 0.62 | 0.61  | 0.61  | 0.55  | 0.55  | 0.55  |
| v/c Ratio               | 1.08                                                                               | 1.09  | 0.08  |       | 0.57  | 0.04  | 0.29 | 0.88  | 0.13  | 0.19  | 0.74  | 0.56  |
| Control Delay           | 131.3                                                                              | 135.2 | 0.4   |       | 86.5  | 0.4   | 17.3 | 32.6  | 7.4   | 56.8  | 55.1  | 33.4  |
| Queue Delay             | 1.2                                                                                | 1.3   | 0.0   |       | 0.0   | 0.0   | 0.0  | 46.8  | 0.0   | 0.0   | 23.5  | 0.8   |
| Total Delay             | 132.5                                                                              | 136.5 | 0.4   |       | 86.5  | 0.4   | 17.3 | 79.4  | 7.4   | 56.8  | 78.7  | 34.2  |
| LOS                     | F                                                                                  | F     | A     |       | F     | A     | B    | E     | A     | E     | E     | C     |
| Approach Delay          |                                                                                    | 128.7 |       |       | 77.7  |       |      | 73.6  |       |       | 66.1  |       |
| Approach LOS            |                                                                                    | F     |       |       | E     |       |      | E     |       |       | E     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 91 (57%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.09

Intersection Signal Delay: 78.6

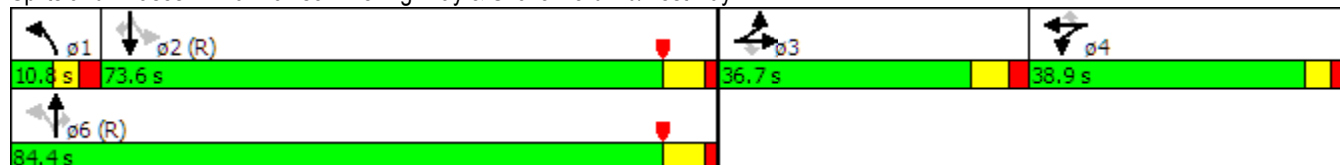
Intersection LOS: E

Intersection Capacity Utilization 89.6%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 10: Dawsonville Highway & Shallowford Rd/Best Buy



## Appendix F

### Future Phase Two Intersection Analysis

Lanier Tract DRI  
1: Sportsman Club Road & Strickland Drive

phase two a.m.

| Intersection             |        |       |        |      |        |      |
|--------------------------|--------|-------|--------|------|--------|------|
| Int Delay, s/veh         | 4.2    |       |        |      |        |      |
|                          |        |       |        |      |        |      |
| Movement                 | WBL    | WBR   | NBT    | NBR  | SBL    | SBT  |
| Vol, veh/h               | 30     | 0     | 7      | 11   | 0      | 25   |
| Conflicting Peds, #/hr   | 0      | 0     | 0      | 0    | 0      | 0    |
| Sign Control             | Stop   | Stop  | Free   | Free | Free   | Free |
| RT Channelized           | -      | None  | -      | None | -      | None |
| Storage Length           | 0      | -     | -      | -    | -      | -    |
| Veh in Median Storage, # | 0      | -     | 0      | -    | -      | 0    |
| Grade, %                 | 0      | -     | 0      | -    | -      | 0    |
| Peak Hour Factor         | 50     | 50    | 58     | 58   | 64     | 64   |
| Heavy Vehicles, %        | 2      | 2     | 2      | 2    | 2      | 2    |
| Mvmt Flow                | 60     | 0     | 12     | 19   | 0      | 39   |
|                          |        |       |        |      |        |      |
| Major/Minor              | Minor1 |       | Major1 |      | Major2 |      |
| Conflicting Flow All     | 61     | 22    | 0      | 0    | 31     | 0    |
| Stage 1                  | 22     | -     | -      | -    | -      | -    |
| Stage 2                  | 39     | -     | -      | -    | -      | -    |
| Critical Hdwy            | 6.42   | 6.22  | -      | -    | 4.12   | -    |
| Critical Hdwy Stg 1      | 5.42   | -     | -      | -    | -      | -    |
| Critical Hdwy Stg 2      | 5.42   | -     | -      | -    | -      | -    |
| Follow-up Hdwy           | 3.518  | 3.318 | -      | -    | 2.218  | -    |
| Pot Cap-1 Maneuver       | 945    | 1055  | -      | -    | 1582   | -    |
| Stage 1                  | 1001   | -     | -      | -    | -      | -    |
| Stage 2                  | 983    | -     | -      | -    | -      | -    |
| Platoon blocked, %       |        |       | -      | -    |        | -    |
| Mov Cap-1 Maneuver       | 945    | 1055  | -      | -    | 1582   | -    |
| Mov Cap-2 Maneuver       | 945    | -     | -      | -    | -      | -    |
| Stage 1                  | 1001   | -     | -      | -    | -      | -    |
| Stage 2                  | 983    | -     | -      | -    | -      | -    |
|                          |        |       |        |      |        |      |
| Approach                 | WB     |       | NB     |      | SB     |      |
| HCM Control Delay, s     | 9.1    |       | 0      |      | 0      |      |
| HCM LOS                  | A      |       |        |      |        |      |
|                          |        |       |        |      |        |      |
| Minor Lane/Major Mvmt    | NBT    | NBR   | WBLn1  | SBL  | SBT    |      |
| Capacity (veh/h)         | -      | -     | 945    | 1582 | -      |      |
| HCM Lane V/C Ratio       | -      | -     | 0.063  | -    | -      |      |
| HCM Control Delay (s)    | -      | -     | 9.1    | 0    | -      |      |
| HCM Lane LOS             | -      | -     | A      | A    | -      |      |
| HCM 95th %tile Q(veh)    | -      | -     | 0.2    | 0    | -      |      |

Lanier Tract DRI  
2: GA 53 & Sportsman Club Road

phase two a.m.

| Intersection                                                                                                         |        |       |      |        |       |      |        |          |      |          |      |      |
|----------------------------------------------------------------------------------------------------------------------|--------|-------|------|--------|-------|------|--------|----------|------|----------|------|------|
| Int Delay, s/veh                                                                                                     | 23.7   |       |      |        |       |      |        |          |      |          |      |      |
|                                                                                                                      |        |       |      |        |       |      |        |          |      |          |      |      |
| Movement                                                                                                             | EBL    | EBT   | EBR  | WBL    | WBT   | WBR  | NBL    | NBT      | NBR  | SBL      | SBT  | SBR  |
| Vol, veh/h                                                                                                           | 14     | 1899  | 0    | 5      | 850   | 15   | 0      | 0        | 0    | 41       | 0    | 23   |
| Conflicting Peds, #/hr                                                                                               | 0      | 0     | 0    | 0      | 0     | 0    | 0      | 0        | 0    | 0        | 0    | 0    |
| Sign Control                                                                                                         | Free   | Free  | Free | Free   | Free  | Free | Stop   | Stop     | Stop | Stop     | Stop | Stop |
| RT Channelized                                                                                                       | -      | -     | None | -      | -     | None | -      | -        | None | -        | -    | None |
| Storage Length                                                                                                       | 0      | -     | -    | 0      | -     | -    | -      | -        | -    | -        | -    | -    |
| Veh in Median Storage, #                                                                                             | -      | 0     | -    | -      | 0     | -    | -      | 0        | -    | -        | 0    | -    |
| Grade, %                                                                                                             | -      | 0     | -    | -      | 0     | -    | -      | 0        | -    | -        | 0    | -    |
| Peak Hour Factor                                                                                                     | 86     | 86    | 86   | 84     | 84    | 84   | 92     | 92       | 92   | 70       | 70   | 70   |
| Heavy Vehicles, %                                                                                                    | 2      | 2     | 2    | 2      | 2     | 2    | 2      | 2        | 2    | 2        | 2    | 2    |
| Mvmt Flow                                                                                                            | 16     | 2208  | 0    | 6      | 1012  | 18   | 0      | 0        | 0    | 59       | 0    | 33   |
|                                                                                                                      |        |       |      |        |       |      |        |          |      |          |      |      |
| Major/Minor                                                                                                          | Major1 |       |      | Major2 |       |      | Minor1 |          |      | Minor2   |      |      |
| Conflicting Flow All                                                                                                 | 1030   | 0     | 0    | 2208   | 0     | 0    | 2759   | 3283     | 1104 | 2170     | 3274 | 515  |
| Stage 1                                                                                                              | -      | -     | -    | -      | -     | -    | 2241   | 2241     | -    | 1033     | 1033 | -    |
| Stage 2                                                                                                              | -      | -     | -    | -      | -     | -    | 518    | 1042     | -    | 1137     | 2241 | -    |
| Critical Hdwy                                                                                                        | 4.14   | -     | -    | 4.14   | -     | -    | 7.54   | 6.54     | 6.94 | 7.54     | 6.54 | 6.94 |
| Critical Hdwy Stg 1                                                                                                  | -      | -     | -    | -      | -     | -    | 6.54   | 5.54     | -    | 6.54     | 5.54 | -    |
| Critical Hdwy Stg 2                                                                                                  | -      | -     | -    | -      | -     | -    | 6.54   | 5.54     | -    | 6.54     | 5.54 | -    |
| Follow-up Hdwy                                                                                                       | 2.22   | -     | -    | 2.22   | -     | -    | 3.52   | 4.02     | 3.32 | 3.52     | 4.02 | 3.32 |
| Pot Cap-1 Maneuver                                                                                                   | 670    | -     | -    | 234    | -     | -    | 9      | 9        | 206  | ~ 26     | 9    | 505  |
| Stage 1                                                                                                              | -      | -     | -    | -      | -     | -    | 43     | 78       | -    | 249      | 308  | -    |
| Stage 2                                                                                                              | -      | -     | -    | -      | -     | -    | 509    | 305      | -    | 215      | 78   | -    |
| Platoon blocked, %                                                                                                   |        |       |      |        |       |      |        |          |      |          |      |      |
| Mov Cap-1 Maneuver                                                                                                   | 670    | -     | -    | 234    | -     | -    | 8      | 9        | 206  | ~ 25     | 9    | 505  |
| Mov Cap-2 Maneuver                                                                                                   | -      | -     | -    | -      | -     | -    | 8      | 9        | -    | ~ 25     | 9    | -    |
| Stage 1                                                                                                              | -      | -     | -    | -      | -     | -    | 42     | 76       | -    | 243      | 300  | -    |
| Stage 2                                                                                                              | -      | -     | -    | -      | -     | -    | 464    | 297      | -    | 210      | 76   | -    |
|                                                                                                                      |        |       |      |        |       |      |        |          |      |          |      |      |
| Approach                                                                                                             | EB     |       |      | WB     |       |      | NB     |          |      | SB       |      |      |
| HCM Control Delay, s                                                                                                 | 0.1    |       |      | 0.1    |       |      | 0      |          |      | \$ 866.3 |      |      |
| HCM LOS                                                                                                              |        |       |      |        |       |      | A      |          |      | F        |      |      |
|                                                                                                                      |        |       |      |        |       |      |        |          |      |          |      |      |
| Minor Lane/Major Mvmt                                                                                                | NBLn1  | EBL   | EBT  | EBR    | WBL   | WBT  | WBR    | SBLn1    |      |          |      |      |
| Capacity (veh/h)                                                                                                     | -      | 670   | -    | -      | 234   | -    | -      | 38       |      |          |      |      |
| HCM Lane V/C Ratio                                                                                                   | -      | 0.024 | -    | -      | 0.025 | -    | -      | 2.406    |      |          |      |      |
| HCM Control Delay (s)                                                                                                | 0      | 10.5  | -    | -      | 20.8  | -    | -      | \$ 866.3 |      |          |      |      |
| HCM Lane LOS                                                                                                         | A      | B     | -    | -      | C     | -    | -      | F        |      |          |      |      |
| HCM 95th %tile Q(veh)                                                                                                | -      | 0.1   | -    | -      | 0.1   | -    | -      | 10.1     |      |          |      |      |
| Notes                                                                                                                |        |       |      |        |       |      |        |          |      |          |      |      |
| ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |        |       |      |        |       |      |        |          |      |          |      |      |

Lanier Tract DRI  
3: GA 53 & Avonlea Way

phase two a.m.

| Intersection                                                                                                         |          |      |      |           |       |          |        |       |      |        |      |      |
|----------------------------------------------------------------------------------------------------------------------|----------|------|------|-----------|-------|----------|--------|-------|------|--------|------|------|
| Int Delay, s/veh                                                                                                     | 11.1     |      |      |           |       |          |        |       |      |        |      |      |
|                                                                                                                      |          |      |      |           |       |          |        |       |      |        |      |      |
| Movement                                                                                                             | EBL      | EBT  | EBR  | WBL       | WBT   | WBR      | NBL    | NBT   | NBR  | SBL    | SBT  | SBR  |
| Vol, veh/h                                                                                                           | 17       | 0    | 79   | 2         | 0     | 13       | 13     | 875   | 2    | 15     | 1881 | 7    |
| Conflicting Peds, #/hr                                                                                               | 0        | 0    | 0    | 0         | 0     | 0        | 0      | 0     | 0    | 0      | 0    | 0    |
| Sign Control                                                                                                         | Stop     | Stop | Stop | Stop      | Stop  | Stop     | Free   | Free  | Free | Free   | Free | Free |
| RT Channelized                                                                                                       | -        | -    | None | -         | -     | None     | -      | -     | None | -      | -    | None |
| Storage Length                                                                                                       | 0        | -    | 0    | 0         | -     | 0        | 0      | -     | -    | 0      | -    | 0    |
| Veh in Median Storage, #                                                                                             | -        | 0    | -    | -         | 0     | -        | -      | 0     | -    | -      | 0    | -    |
| Grade, %                                                                                                             | -        | 0    | -    | -         | 0     | -        | -      | 0     | -    | -      | 0    | -    |
| Peak Hour Factor                                                                                                     | 84       | 84   | 84   | 80        | 80    | 80       | 88     | 88    | 88   | 86     | 86   | 86   |
| Heavy Vehicles, %                                                                                                    | 2        | 2    | 2    | 2         | 2     | 2        | 2      | 2     | 2    | 2      | 2    | 2    |
| Mvmt Flow                                                                                                            | 20       | 0    | 94   | 2         | 0     | 16       | 15     | 994   | 2    | 17     | 2187 | 8    |
|                                                                                                                      |          |      |      |           |       |          |        |       |      |        |      |      |
| Major/Minor                                                                                                          | Minor2   |      |      | Minor1    |       |          | Major1 |       |      | Major2 |      |      |
| Conflicting Flow All                                                                                                 | 2749     | 3248 | 1094 | 2153      | 3247  | 498      | 2187   | 0     | 0    | 997    | 0    | 0    |
| Stage 1                                                                                                              | 2222     | 2222 | -    | 1025      | 1025  | -        | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 527      | 1026 | -    | 1128      | 2222  | -        | -      | -     | -    | -      | -    | -    |
| Critical Hdwy                                                                                                        | 7.54     | 6.54 | 6.94 | 7.54      | 6.54  | 6.94     | 4.14   | -     | -    | 4.14   | -    | -    |
| Critical Hdwy Stg 1                                                                                                  | 6.54     | 5.54 | -    | 6.54      | 5.54  | -        | -      | -     | -    | -      | -    | -    |
| Critical Hdwy Stg 2                                                                                                  | 6.54     | 5.54 | -    | 6.54      | 5.54  | -        | -      | -     | -    | -      | -    | -    |
| Follow-up Hdwy                                                                                                       | 3.52     | 4.02 | 3.32 | 3.52      | 4.02  | 3.32     | 2.22   | -     | -    | 2.22   | -    | -    |
| Pot Cap-1 Maneuver                                                                                                   | ~ 9      | 9    | 209  | 27        | 9     | 518      | 239    | -     | -    | 690    | -    | -    |
| Stage 1                                                                                                              | 44       | 79   | -    | 252       | 311   | -        | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 502      | 310  | -    | 218       | 79    | -        | -      | -     | -    | -      | -    | -    |
| Platoon blocked, %                                                                                                   |          |      |      |           |       |          |        | -     | -    |        | -    | -    |
| Mov Cap-1 Maneuver                                                                                                   | ~ 8      | 8    | 209  | 14        | 8     | 518      | 239    | -     | -    | 690    | -    | -    |
| Mov Cap-2 Maneuver                                                                                                   | ~ 8      | 8    | -    | 14        | 8     | -        | -      | -     | -    | -      | -    | -    |
| Stage 1                                                                                                              | 41       | 77   | -    | 236       | 291   | -        | -      | -     | -    | -      | -    | -    |
| Stage 2                                                                                                              | 456      | 291  | -    | 117       | 77    | -        | -      | -     | -    | -      | -    | -    |
|                                                                                                                      |          |      |      |           |       |          |        |       |      |        |      |      |
| Approach                                                                                                             | EB       |      |      | WB        |       |          | NB     |       |      | SB     |      |      |
| HCM Control Delay, s                                                                                                 | \$ 311.5 |      |      | 52.1      |       |          | 0.3    |       |      | 0.1    |      |      |
| HCM LOS                                                                                                              | F        |      |      | F         |       |          |        |       |      |        |      |      |
|                                                                                                                      |          |      |      |           |       |          |        |       |      |        |      |      |
| Minor Lane/Major Mvmt                                                                                                | NBL      | NBT  | NBR  | EBLn1     | EBLn2 | WBLn1    | WBLn2  | SBL   | SBT  | SBR    |      |      |
| Capacity (veh/h)                                                                                                     | 239      | -    | -    | 8         | 209   | 14       | 518    | 690   | -    | -      |      |      |
| HCM Lane V/C Ratio                                                                                                   | 0.062    | -    | -    | 2.53      | 0.45  | 0.179    | 0.031  | 0.025 | -    | -      |      |      |
| HCM Control Delay (s)                                                                                                | 21.1     | -    |      | \$ 1593.4 | 35.6  | \$ 311.5 | 12.2   | 10.4  | -    | -      |      |      |
| HCM Lane LOS                                                                                                         | C        | -    | -    | F         | E     | F        | B      | B     | -    | -      |      |      |
| HCM 95th %tile Q(veh)                                                                                                | 0.2      | -    | -    | 3.6       | 2.1   | 0.5      | 0.1    | 0.1   | -    | -      |      |      |
| Notes                                                                                                                |          |      |      |           |       |          |        |       |      |        |      |      |
| ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |          |      |      |           |       |          |        |       |      |        |      |      |

Lanier Tract DRI  
4: GA 53 & Canterbury Road

phase two a.m.

| Intersection     |    |  |  |  |  |  |  |  |  |  |  |  |
|------------------|----|--|--|--|--|--|--|--|--|--|--|--|
| Int Delay, s/veh | 29 |  |  |  |  |  |  |  |  |  |  |  |

| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol, veh/h               | 20   | 0    | 105  | 29   | 0    | 15   | 25   | 820  | 40   | 30   | 1980 | 8    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | 0    | -    | 0    | 0    | -    | 0    | 0    | -    | -    | 0    | -    | 0    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 88   | 92   | 88   | 92   | 92   | 92   | 86   | 86   | 92   | 92   | 91   | 91   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 23   | 0    | 119  | 32   | 0    | 16   | 29   | 953  | 43   | 33   | 2176 | 9    |

| Major/Minor          | Minor2 |      |      | Minor1 |      |      | Major1 |   |   | Major2 |   |   |
|----------------------|--------|------|------|--------|------|------|--------|---|---|--------|---|---|
| Conflicting Flow All | 2776   | 3296 | 1088 | 2186   | 3274 | 498  | 2176   | 0 | 0 | 997    | 0 | 0 |
| Stage 1              | 2241   | 2241 | -    | 1033   | 1033 | -    | -      | - | - | -      | - | - |
| Stage 2              | 535    | 1055 | -    | 1153   | 2241 | -    | -      | - | - | -      | - | - |
| Critical Hdwy        | 7.54   | 6.54 | 6.94 | 7.54   | 6.54 | 6.94 | 4.14   | - | - | 4.14   | - | - |
| Critical Hdwy Stg 1  | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    | -      | - | - | -      | - | - |
| Critical Hdwy Stg 2  | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    | -      | - | - | -      | - | - |
| Follow-up Hdwy       | 3.52   | 4.02 | 3.32 | 3.52   | 4.02 | 3.32 | 2.22   | - | - | 2.22   | - | - |
| Pot Cap-1 Maneuver   | ~ 9    | 8    | 211  | ~ 25   | 9    | 518  | 241    | - | - | 690    | - | - |
| Stage 1              | 43     | 78   | -    | 249    | 308  | -    | -      | - | - | -      | - | - |
| Stage 2              | 497    | 301  | -    | 210    | 78   | -    | -      | - | - | -      | - | - |
| Platoon blocked, %   |        |      |      |        |      |      |        | - | - |        | - | - |
| Mov Cap-1 Maneuver   | ~ 8    | 7    | 211  | ~ 10   | 8    | 518  | 241    | - | - | 690    | - | - |
| Mov Cap-2 Maneuver   | ~ 8    | 7    | -    | ~ 10   | 8    | -    | -      | - | - | -      | - | - |
| Stage 1              | 38     | 74   | -    | 219    | 271  | -    | -      | - | - | -      | - | - |
| Stage 2              | 423    | 265  | -    | 87     | 74   | -    | -      | - | - | -      | - | - |

| Approach             | EB       | WB        | NB  | SB  |
|----------------------|----------|-----------|-----|-----|
| HCM Control Delay, s | \$ 312.8 | \$ 1132.9 | 0.6 | 0.2 |
| HCM LOS              | F        | F         |     |     |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1     | EBLn2 | WBLn1     | WBLn2 | SBL   | SBT | SBR |
|-----------------------|-------|-----|-----|-----------|-------|-----------|-------|-------|-----|-----|
| Capacity (veh/h)      | 241   | -   | -   | 8         | 211   | 10        | 518   | 690   | -   | -   |
| HCM Lane V/C Ratio    | 0.121 | -   | -   | 2.841     | 0.565 | 3.152     | 0.031 | 0.047 | -   | -   |
| HCM Control Delay (s) | 22    | -   | -   | \$ 1733.4 | 42.2  | \$ 1712.5 | 12.2  | 10.5  | -   | -   |
| HCM Lane LOS          | C     | -   | -   | F         | E     | F         | B     | B     | -   | -   |
| HCM 95th %tile Q(veh) | 0.4   | -   | -   | 4         | 3.1   | 5         | 0.1   | 0.1   | -   | -   |

| Notes                      |                        |                            |  |  |  |  |                                |  |  |  |
|----------------------------|------------------------|----------------------------|--|--|--|--|--------------------------------|--|--|--|
| ~: Volume exceeds capacity | \$: Delay exceeds 300s | +: Computation Not Defined |  |  |  |  | *: All major volume in platoon |  |  |  |



Lanier Tract DRI  
7: GA 53 & Beechwood Boulevard

phase two a.m.

Intersection

Int Delay, s/veh 3.3

| Movement                 | EBL  | EBR   | NBL  | NBT   | SBT  | SBR  |
|--------------------------|------|-------|------|-------|------|------|
| Vol, veh/h               | 6    | 45    | 30   | 961   | 2306 | 2    |
| Conflicting Peds, #/hr   | 0    | 0     | 0    | 0     | 0    | 0    |
| Sign Control             | Stop | Stop  | Free | Free  | Free | Free |
| RT Channelized           | -    | Yield | -    | Yield | -    | None |
| Storage Length           | 0    | 0     | 200  | -     | -    | 360  |
| Veh in Median Storage, # | 0    | -     | -    | 0     | 0    | -    |
| Grade, %                 | 0    | -     | -    | 1     | 0    | -    |
| Peak Hour Factor         | 82   | 82    | 87   | 87    | 89   | 89   |
| Heavy Vehicles, %        | 0    | 0     | 0    | 1     | 0    | 0    |
| Mvmt Flow                | 7    | 55    | 34   | 1105  | 2591 | 2    |

| Major/Minor          | Minor2 |      | Major1 |   | Major2 |   |
|----------------------|--------|------|--------|---|--------|---|
| Conflicting Flow All | 3212   | 1296 | 2591   | 0 | -      | 0 |
| Stage 1              | 2591   | -    | -      | - | -      | - |
| Stage 2              | 621    | -    | -      | - | -      | - |
| Critical Hdwy        | 6.8    | 6.9  | 4.1    | - | -      | - |
| Critical Hdwy Stg 1  | 5.8    | -    | -      | - | -      | - |
| Critical Hdwy Stg 2  | 5.8    | -    | -      | - | -      | - |
| Follow-up Hdwy       | 3.5    | 3.3  | 2.2    | - | -      | - |
| Pot Cap-1 Maneuver   | 8      | 155  | 170    | - | -      | - |
| Stage 1              | 43     | -    | -      | - | -      | - |
| Stage 2              | 504    | -    | -      | - | -      | - |
| Platoon blocked, %   |        |      |        | - | -      | - |
| Mov Cap-1 Maneuver   | ~ 6    | 155  | 170    | - | -      | - |
| Mov Cap-2 Maneuver   | ~ 6    | -    | -      | - | -      | - |
| Stage 1              | 43     | -    | -      | - | -      | - |
| Stage 2              | 403    | -    | -      | - | -      | - |

| Approach             | EB    | NB | SB |
|----------------------|-------|----|----|
| HCM Control Delay, s | 180.4 | 1  | 0  |
| HCM LOS              | F     |    |    |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1  | EBLn2 | SBT | SBR |
|-----------------------|-------|-----|--------|-------|-----|-----|
| Capacity (veh/h)      | 170   | -   | 6      | 155   | -   | -   |
| HCM Lane V/C Ratio    | 0.203 | -   | 1.22   | 0.354 | -   | -   |
| HCM Control Delay (s) | 31.5  | \$  | 1230.3 | 40.4  | -   | -   |
| HCM Lane LOS          | D     | -   | F      | E     | -   | -   |
| HCM 95th %tile Q(veh) | 0.7   | -   | 1.7    | 1.5   | -   | -   |

Notes

~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

## Lanier Tract DRI

## 5: GA 53 &amp; Lanier Valley Dr/Ahaluna Dr

phase two a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Volume (vph)               | 21                                                                                | 6                                                                                 | 127                                                                               | 92                                                                                | 3                                                                                 | 27                                                                                | 61                                                                                  | 831                                                                                 | 47                                                                                  | 21                                                                                  | 2139                                                                                | 0                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 2%                                                                                |                                                                                   |                                                                                   | -4%                                                                               |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 100                                                                                 |                                                                                     | 0                                                                                   | 140                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.889                                                                             |                                                                                   |                                                                                   | 0.970                                                                             |                                                                                   |                                                                                     | 0.992                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   | 0.993                                                                             |                                                                                   |                                                                                   | 0.964                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1661                                                                              | 0                                                                                 | 0                                                                                 | 1812                                                                              | 0                                                                                 | 1796                                                                                | 3497                                                                                | 0                                                                                   | 1814                                                                                | 3628                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.945                                                                             |                                                                                   |                                                                                   | 0.481                                                                             |                                                                                   | 0.037                                                                               |                                                                                     |                                                                                     | 0.277                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1580                                                                              | 0                                                                                 | 0                                                                                 | 904                                                                               | 0                                                                                 | 70                                                                                  | 3497                                                                                | 0                                                                                   | 529                                                                                 | 3628                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 58                                                                                |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                     | 11                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 340                                                                               |                                                                                   |                                                                                   | 322                                                                               |                                                                                   |                                                                                     | 888                                                                                 |                                                                                     |                                                                                     | 1417                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.7                                                                               |                                                                                   |                                                                                   | 7.3                                                                               |                                                                                   |                                                                                     | 13.5                                                                                |                                                                                     |                                                                                     | 21.5                                                                                |                                                                                     |
| Peak Hour Factor           | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.83                                                                              | 0.83                                                                              | 0.83                                                                              | 0.85                                                                                | 0.85                                                                                | 0.85                                                                                | 0.87                                                                                | 0.87                                                                                | 0.87                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 23                                                                                | 7                                                                                 | 140                                                                               | 111                                                                               | 4                                                                                 | 33                                                                                | 72                                                                                  | 978                                                                                 | 55                                                                                  | 24                                                                                  | 2459                                                                                | 0                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 170                                                                               | 0                                                                                 | 0                                                                                 | 148                                                                               | 0                                                                                 | 72                                                                                  | 1033                                                                                | 0                                                                                   | 24                                                                                  | 2459                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 |                                                                                     | 0                                                                                   | 336                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   |                                                                                     | 0                                                                                   | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 8                                                                                 | 8                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 10.6                                                                                | 23.0                                                                                |                                                                                     | 23.0                                                                                | 23.0                                                                                |                                                                                     |

# Lanier Tract DRI

## 5: GA 53 & Lanier Valley Dr/Ahaluna Dr

phase two a.m.

|                       |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group            | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Total Split (s)       | 30.0                                                                              | 30.0                                                                              |                                                                                   | 30.0                                                                              | 30.0                                                                              |                                                                                   | 10.6                                                                               | 120.0                                                                               |                                                                                     | 109.4                                                                               | 109.4                                                                               |                                                                                     |
| Total Split (%)       | 20.0%                                                                             | 20.0%                                                                             |                                                                                   | 20.0%                                                                             | 20.0%                                                                             |                                                                                   | 7.1%                                                                               | 80.0%                                                                               |                                                                                     | 72.9%                                                                               | 72.9%                                                                               |                                                                                     |
| Maximum Green (s)     | 23.4                                                                              | 23.4                                                                              |                                                                                   | 23.4                                                                              | 23.4                                                                              |                                                                                   | 5.0                                                                                | 113.9                                                                               |                                                                                     | 103.3                                                                               | 103.3                                                                               |                                                                                     |
| Yellow Time (s)       | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 3.0                                                                                | 4.5                                                                                 |                                                                                     | 4.5                                                                                 | 4.5                                                                                 |                                                                                     |
| All-Red Time (s)      | 2.6                                                                               | 2.6                                                                               |                                                                                   | 2.6                                                                               | 2.6                                                                               |                                                                                   | 2.6                                                                                | 1.6                                                                                 |                                                                                     | 1.6                                                                                 | 1.6                                                                                 |                                                                                     |
| Lost Time Adjust (s)  |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)   |                                                                                   | 6.6                                                                               |                                                                                   |                                                                                   | 6.6                                                                               |                                                                                   | 5.6                                                                                | 6.1                                                                                 |                                                                                     | 6.1                                                                                 | 6.1                                                                                 |                                                                                     |
| Lead/Lag              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                                |                                                                                     |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s) | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode           | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                               | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               |                                                                                     |
| Act Effect Green (s)  |                                                                                   | 23.4                                                                              |                                                                                   |                                                                                   | 23.4                                                                              |                                                                                   | 114.4                                                                              | 113.9                                                                               |                                                                                     | 103.3                                                                               | 103.3                                                                               |                                                                                     |
| Actuated g/C Ratio    |                                                                                   | 0.16                                                                              |                                                                                   |                                                                                   | 0.16                                                                              |                                                                                   | 0.76                                                                               | 0.76                                                                                |                                                                                     | 0.69                                                                                | 0.69                                                                                |                                                                                     |
| v/c Ratio             |                                                                                   | 0.58                                                                              |                                                                                   |                                                                                   | 1.01                                                                              |                                                                                   | 0.65                                                                               | 0.39                                                                                |                                                                                     | 0.07                                                                                | 0.98                                                                                |                                                                                     |
| Control Delay         |                                                                                   | 46.8                                                                              |                                                                                   |                                                                                   | 134.1                                                                             |                                                                                   | 57.0                                                                               | 3.3                                                                                 |                                                                                     | 8.2                                                                                 | 37.4                                                                                |                                                                                     |
| Queue Delay           |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Delay           |                                                                                   | 46.8                                                                              |                                                                                   |                                                                                   | 134.1                                                                             |                                                                                   | 57.0                                                                               | 3.3                                                                                 |                                                                                     | 8.2                                                                                 | 37.4                                                                                |                                                                                     |
| LOS                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | F                                                                                 |                                                                                   | E                                                                                  | A                                                                                   |                                                                                     | A                                                                                   | D                                                                                   |                                                                                     |
| Approach Delay        |                                                                                   | 46.8                                                                              |                                                                                   |                                                                                   | 134.1                                                                             |                                                                                   |                                                                                    | 6.8                                                                                 |                                                                                     |                                                                                     | 37.1                                                                                |                                                                                     |
| Approach LOS          |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | F                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 26 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.01

Intersection Signal Delay: 32.6

Intersection LOS: C

Intersection Capacity Utilization 91.4%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 5: GA 53 & Lanier Valley Dr/Ahaluna Dr

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |  |  |
| 120 s                                                                               |                                                                                     |                                                                                     | 30 s                                                                                |                                                                                     |                                                                                     | 30 s                                                                                |                                                                                     |                                                                                     |
|  |  |  |  |  |  |  |  |  |
| 10.6 s                                                                              |                                                                                     |                                                                                     | 109.4 s                                                                             |                                                                                     |                                                                                     | 30 s                                                                                |                                                                                     |                                                                                     |

## Lanier Tract DRI

## 6: 53-Dawsonville Hwy &amp; Academy Sports

phase two a.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |  |  |  |  |  |  |  |
| Volume (vph)               | 2                                                                                 | 0                                                                                 | 7                                                                                 | 2                                                                                 | 0                                                                                 | 0                                                                                 | 12                                                                                  | 909                                                                                 | 10                                                                                  | 6                                                                                   | 2287                                                                                | 4                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 4%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 70                                                                                | 200                                                                                 |                                                                                     | 170                                                                                 | 190                                                                                 |                                                                                     | 360                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1805                                                                              | 1900                                                                              | 1615                                                                              | 1769                                                                              | 1862                                                                              | 1862                                                                              | 1796                                                                                | 3556                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 0.031                                                                               |                                                                                     |                                                                                     | 0.266                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1900                                                                              | 1900                                                                              | 1615                                                                              | 1862                                                                              | 1862                                                                              | 1862                                                                              | 59                                                                                  | 3556                                                                                | 1607                                                                                | 505                                                                                 | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 67                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 68                                                                                  |                                                                                     |                                                                                     | 68                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 262                                                                               |                                                                                   |                                                                                   | 246                                                                               |                                                                                   |                                                                                     | 1836                                                                                |                                                                                     |                                                                                     | 685                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.1                                                                               |                                                                                   |                                                                                   | 6.7                                                                               |                                                                                   |                                                                                     | 27.8                                                                                |                                                                                     |                                                                                     | 10.4                                                                                |                                                                                     |
| Peak Hour Factor           | 0.67                                                                              | 0.67                                                                              | 0.67                                                                              | 0.50                                                                              | 0.50                                                                              | 0.50                                                                              | 0.86                                                                                | 0.86                                                                                | 0.86                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 3                                                                                 | 0                                                                                 | 10                                                                                | 4                                                                                 | 0                                                                                 | 0                                                                                 | 14                                                                                  | 1057                                                                                | 12                                                                                  | 7                                                                                   | 2541                                                                                | 4                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 3                                                                                 | 0                                                                                 | 10                                                                                | 4                                                                                 | 0                                                                                 | 0                                                                                 | 14                                                                                  | 1057                                                                                | 12                                                                                  | 7                                                                                   | 2541                                                                                | 4                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              |                                                                                   | Perm                                                                              | Perm                                                                              |                                                                                   | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 2                                                                                   |                                                                                     | 2                                                                                   | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 42.0                                                                              | 42.0                                                                              | 42.0                                                                              | 42.4                                                                              | 42.4                                                                              | 42.4                                                                              | 11.4                                                                                | 30.3                                                                                | 30.3                                                                                | 11.0                                                                                | 29.3                                                                                | 29.3                                                                                |

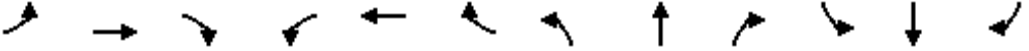
Synchro 8 Report

Marc R Acampora, PE, LLC

# Lanier Tract DRI

## 6: 53-Dawsonville Hwy & Academy Sports

phase two a.m.

|                         |  |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 42.4                                                                               | 42.4  | 42.4  | 42.4  | 42.4  | 42.4  | 11.4  | 96.6  | 96.6  | 11.0  | 96.2  | 96.2  |
| Total Split (%)         | 28.3%                                                                              | 28.3% | 28.3% | 28.3% | 28.3% | 28.3% | 7.6%  | 64.4% | 64.4% | 7.3%  | 64.1% | 64.1% |
| Maximum Green (s)       | 36.0                                                                               | 36.0  | 36.0  | 36.0  | 36.0  | 36.0  | 5.0   | 90.4  | 90.4  | 5.0   | 90.0  | 90.0  |
| Yellow Time (s)         | 3.4                                                                                | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 4.3   | 4.3   | 3.0   | 4.3   | 4.3   |
| All-Red Time (s)        | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 1.9   | 1.9   | 3.0   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.4                                                                                | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.2   | 6.2   | 6.0   | 6.2   | 6.2   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           | 4.0                                                                                | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 23.0                                                                               | 23.0  | 23.0  | 32.0  | 32.0  | 32.0  |       | 20.0  | 20.0  |       | 19.0  | 19.0  |
| Pedestrian Calls (#/hr) | 0                                                                                  | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    | 6.1                                                                                |       | 6.1   | 6.1   |       |       | 137.2 | 139.9 | 139.9 | 136.1 | 137.4 | 137.4 |
| Actuated g/C Ratio      | 0.04                                                                               |       | 0.04  | 0.04  |       |       | 0.91  | 0.93  | 0.93  | 0.91  | 0.92  | 0.92  |
| v/c Ratio               | 0.04                                                                               |       | 0.08  | 0.05  |       |       | 0.12  | 0.32  | 0.01  | 0.01  | 0.77  | 0.00  |
| Control Delay           | 69.5                                                                               |       | 1.1   | 70.0  |       |       | 6.0   | 1.1   | 0.0   | 0.8   | 5.1   | 0.0   |
| Queue Delay             | 0.0                                                                                |       | 0.0   | 0.0   |       |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay             | 69.5                                                                               |       | 1.1   | 70.0  |       |       | 6.0   | 1.1   | 0.0   | 0.8   | 5.1   | 0.0   |
| LOS                     | E                                                                                  |       | A     | E     |       |       | A     | A     | A     | A     | A     | A     |
| Approach Delay          |                                                                                    |       |       |       |       |       |       | 1.2   |       |       | 5.1   |       |
| Approach LOS            |                                                                                    |       |       |       |       |       |       | A     |       |       | A     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 27 (18%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 145

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.77

Intersection Signal Delay: 4.0

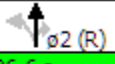
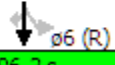
Intersection LOS: A

Intersection Capacity Utilization 87.4%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 6: 53-Dawsonville Hwy & Academy Sports

|                                                                                        |                                                                                            |                                                                                          |
|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
|  p1 |  p2 (R) |  p4 |
| 11 s                                                                                   | 96.6 s                                                                                     | 42.4 s                                                                                   |
|  p5 |  p6 (R) |  p8 |
| 11.4 s                                                                                 | 96.2 s                                                                                     | 42.4 s                                                                                   |

## Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 &amp; McEver Road/McEver

phase two a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |                                                                                   |   |  |  |  |  |  |
| Volume (vph)               | 462                                                                               | 31                                                                                | 378                                                                               | 46                                                                                | 21                                                                                | 22                                                                                | 311                                                                                 | 572                                                                                 | 61                                                                                  | 34                                                                                  | 1352                                                                                | 942                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 1%                                                                                |                                                                                   |                                                                                   | 5%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 180                                                                               |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 310                                                                                 |                                                                                     | 185                                                                                 | 255                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 50                                                                                |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.872                                                                             | 0.850                                                                             |                                                                                   | 0.924                                                                             |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 3484                                                                              | 1566                                                                              | 1527                                                                              | 1760                                                                              | 1712                                                                              | 0                                                                                 | 3484                                                                                | 3487                                                                                | 1575                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   | 0.599                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 3484                                                                              | 1566                                                                              | 1527                                                                              | 1110                                                                              | 1712                                                                              | 0                                                                                 | 3484                                                                                | 3487                                                                                | 1575                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 183                                                                               | 207                                                                               |                                                                                   | 34                                                                                |                                                                                   |                                                                                     |                                                                                     | 184                                                                                 |                                                                                     |                                                                                     | 541                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 45                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 580                                                                               |                                                                                   |                                                                                   | 331                                                                               |                                                                                   |                                                                                     | 921                                                                                 |                                                                                     |                                                                                     | 1624                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 8.8                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                     | 14.0                                                                                |                                                                                     |                                                                                     | 24.6                                                                                |                                                                                     |
| Peak Hour Factor           | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 0.62                                                                              | 0.62                                                                              | 0.62                                                                              | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 3%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 476                                                                               | 32                                                                                | 390                                                                               | 74                                                                                | 34                                                                                | 35                                                                                | 334                                                                                 | 615                                                                                 | 66                                                                                  | 38                                                                                  | 1502                                                                                | 1047                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   | 47%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 476                                                                               | 215                                                                               | 207                                                                               | 74                                                                                | 69                                                                                | 0                                                                                 | 334                                                                                 | 615                                                                                 | 66                                                                                  | 38                                                                                  | 1502                                                                                | 1047                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 24                                                                                |                                                                                   |                                                                                   | 24                                                                                |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                             | NA                                                                                |                                                                                   | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 8                                                                                 |                                                                                   | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 8                                                                                 | 8                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 13.2                                                                              | 50.2                                                                              | 50.2                                                                              | 11.6                                                                              | 48.2                                                                              |                                                                                   | 13.4                                                                                | 35.6                                                                                | 35.6                                                                                | 12.9                                                                                | 44.6                                                                                | 44.6                                                                                |

# Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 & McEver Road/McEver

phase two a.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Total Split (s)         | 23.0                                                                              | 59.1                                                                              | 59.1                                                                              | 12.1                                                                              | 48.2                                                                              |                                                                                   | 19.0                                                                               | 63.0                                                                                | 63.0                                                                                | 15.8                                                                                | 59.8                                                                                | 59.8                                                                                |
| Total Split (%)         | 15.3%                                                                             | 39.4%                                                                             | 39.4%                                                                             | 8.1%                                                                              | 32.1%                                                                             |                                                                                   | 12.7%                                                                              | 42.0%                                                                               | 42.0%                                                                               | 10.5%                                                                               | 39.9%                                                                               | 39.9%                                                                               |
| Maximum Green (s)       | 15.7                                                                              | 51.8                                                                              | 51.8                                                                              | 5.6                                                                               | 40.9                                                                              |                                                                                   | 11.5                                                                               | 56.4                                                                                | 56.4                                                                                | 8.6                                                                                 | 53.2                                                                                | 53.2                                                                                |
| Yellow Time (s)         | 4.3                                                                               | 4.3                                                                               | 4.3                                                                               | 3.5                                                                               | 4.3                                                                               |                                                                                   | 4.5                                                                                | 4.4                                                                                 | 4.4                                                                                 | 4.2                                                                                 | 4.4                                                                                 | 4.4                                                                                 |
| All-Red Time (s)        | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 2.2                                                                                 | 2.2                                                                                 | 3.0                                                                                 | 2.2                                                                                 | 2.2                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 7.3                                                                               | 7.3                                                                               | 7.3                                                                               | 6.5                                                                               | 7.3                                                                               |                                                                                   | 7.5                                                                                | 6.6                                                                                 | 6.6                                                                                 | 7.2                                                                                 | 6.6                                                                                 | 6.6                                                                                 |
| Lead/Lag                | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lag                                                                               |                                                                                   | Lag                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lead                                                                                | Lead                                                                                |
| Lead-Lag Optimize?      | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               |                                                                                   | Yes                                                                                | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              |                                                                                   | None                                                                               | C-Max                                                                               | C-Max                                                                               | None                                                                                | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    | 4.0                                                                                 | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |
| Flash Dont Walk (s)     |                                                                                   | 38.0                                                                              | 38.0                                                                              |                                                                                   | 36.0                                                                              |                                                                                   |                                                                                    | 25.0                                                                                | 25.0                                                                                |                                                                                     | 34.0                                                                                | 34.0                                                                                |
| Pedestrian Calls (#/hr) |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |
| Act Effect Green (s)    | 16.1                                                                              | 17.6                                                                              | 17.6                                                                              | 14.0                                                                              | 8.9                                                                               |                                                                                   | 11.5                                                                               | 93.2                                                                                | 93.2                                                                                | 8.5                                                                                 | 87.4                                                                                | 87.4                                                                                |
| Actuated g/C Ratio      | 0.11                                                                              | 0.12                                                                              | 0.12                                                                              | 0.09                                                                              | 0.06                                                                              |                                                                                   | 0.08                                                                               | 0.62                                                                                | 0.62                                                                                | 0.06                                                                                | 0.58                                                                                | 0.58                                                                                |
| v/c Ratio               | 1.28                                                                              | 0.62                                                                              | 0.57                                                                              | 0.58                                                                              | 0.52                                                                              |                                                                                   | 1.25                                                                               | 0.28                                                                                | 0.06                                                                                | 0.37                                                                                | 0.71                                                                                | 0.89                                                                                |
| Control Delay           | 194.8                                                                             | 20.5                                                                              | 13.4                                                                              | 70.0                                                                              | 51.0                                                                              |                                                                                   | 197.4                                                                              | 17.8                                                                                | 1.4                                                                                 | 74.9                                                                                | 24.1                                                                                | 17.6                                                                                |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 194.8                                                                             | 20.5                                                                              | 13.4                                                                              | 70.0                                                                              | 51.0                                                                              |                                                                                   | 197.4                                                                              | 17.8                                                                                | 1.4                                                                                 | 74.9                                                                                | 24.1                                                                                | 17.6                                                                                |
| LOS                     | F                                                                                 | C                                                                                 | B                                                                                 | E                                                                                 | D                                                                                 |                                                                                   | F                                                                                  | B                                                                                   | A                                                                                   | E                                                                                   | C                                                                                   | B                                                                                   |
| Approach Delay          |                                                                                   | 111.2                                                                             |                                                                                   |                                                                                   | 60.9                                                                              |                                                                                   |                                                                                    | 75.8                                                                                |                                                                                     |                                                                                     | 22.2                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | F                                                                                 |                                                                                   |                                                                                   | E                                                                                 |                                                                                   |                                                                                    | E                                                                                   |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 19 (13%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.28

Intersection Signal Delay: 52.3

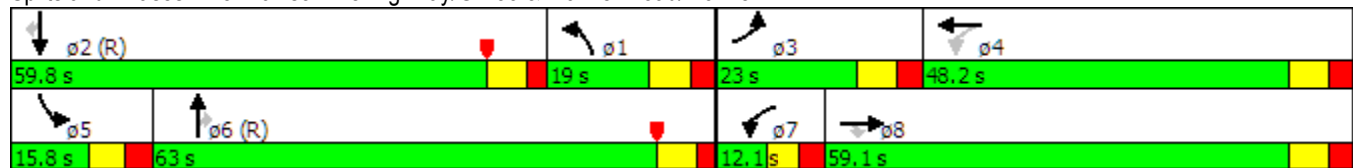
Intersection LOS: D

Intersection Capacity Utilization 89.2%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 8: Dawsonville Highway/GA 53 & McEver Road/McEver



## Lanier Tract DRI

## 9: Dawsonville Highway &amp; Greenhill Circle/Greenhill Circle

phase two a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 74                                                                                | 1                                                                                 | 156                                                                               | 7                                                                                 | 1                                                                                 | 4                                                                                 | 149                                                                                 | 891                                                                                 | 11                                                                                  | 13                                                                                  | 1610                                                                                | 57                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 3%                                                                                |                                                                                   |                                                                                   | 7%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 190                                                                                 |                                                                                     | 190                                                                                 | 185                                                                                 |                                                                                     | 100                                                                                 |
| Storage Lanes              | 0                                                                                 |                                                                                   | 1                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              |                                                                                   | 0.953                                                                             |                                                                                   |                                                                                   | 0.957                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1784                                                                              | 1591                                                                              | 0                                                                                 | 1755                                                                              | 1558                                                                              | 1796                                                                                | 3522                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   | 0.721                                                                             |                                                                                   |                                                                                   | 0.751                                                                             |                                                                                   | 0.072                                                                               |                                                                                     |                                                                                     | 0.277                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1349                                                                              | 1591                                                                              | 0                                                                                 | 1377                                                                              | 1558                                                                              | 136                                                                                 | 3522                                                                                | 1607                                                                                | 526                                                                                 | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 130                                                                               |                                                                                   |                                                                                   | 102                                                                               |                                                                                     |                                                                                     | 57                                                                                  |                                                                                     |                                                                                     | 101                                                                                 |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 288                                                                               |                                                                                   |                                                                                   | 254                                                                               |                                                                                   |                                                                                     | 778                                                                                 |                                                                                     |                                                                                     | 921                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.9                                                                               |                                                                                   |                                                                                   | 6.9                                                                               |                                                                                   |                                                                                     | 11.8                                                                                |                                                                                     |                                                                                     | 14.0                                                                                |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.69                                                                              | 0.69                                                                              | 0.69                                                                              | 0.86                                                                                | 0.86                                                                                | 0.86                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 82                                                                                | 1                                                                                 | 173                                                                               | 10                                                                                | 1                                                                                 | 6                                                                                 | 173                                                                                 | 1036                                                                                | 13                                                                                  | 14                                                                                  | 1750                                                                                | 62                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 83                                                                                | 173                                                                               | 0                                                                                 | 11                                                                                | 6                                                                                 | 173                                                                                 | 1036                                                                                | 13                                                                                  | 14                                                                                  | 1750                                                                                | 62                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.02                                                                              | 1.02                                                                              | 1.02                                                                              | 1.05                                                                              | 1.05                                                                              | 1.05                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              | 23.0                                                                              | 39.9                                                                              | 39.9                                                                              | 39.9                                                                              | 11.0                                                                                | 28.0                                                                                | 28.0                                                                                | 10.0                                                                                | 36.0                                                                                | 36.0                                                                                |



# Lanier Tract DRI

## 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle

phase two a.m.

|                         |  |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 39.9                                                                               | 39.9  | 39.9  | 39.9  | 39.9  | 39.9  | 21.0  | 100.1 | 100.1 | 10.0  | 89.1  | 89.1  |
| Total Split (%)         | 26.6%                                                                              | 26.6% | 26.6% | 26.6% | 26.6% | 26.6% | 14.0% | 66.7% | 66.7% | 6.7%  | 59.4% | 59.4% |
| Maximum Green (s)       | 34.0                                                                               | 34.0  | 34.0  | 34.0  | 34.0  | 34.0  | 15.0  | 94.1  | 94.1  | 5.0   | 83.1  | 83.1  |
| Yellow Time (s)         | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 4.4   | 4.4   | 3.5   | 4.4   | 4.4   |
| All-Red Time (s)        | 2.9                                                                                | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 3.0   | 1.6   | 1.6   | 1.5   | 1.6   | 1.6   |
| Lost Time Adjust (s)    |                                                                                    | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |                                                                                    | 5.9   | 5.9   |       | 5.9   | 5.9   | 6.0   | 6.0   | 6.0   | 5.0   | 6.0   | 6.0   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           |                                                                                    |       |       | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    |       |       | 30.0  | 30.0  | 30.0  |       | 18.0  | 18.0  |       | 26.0  | 26.0  |
| Pedestrian Calls (#/hr) |                                                                                    |       |       | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    |                                                                                    | 14.6  | 14.6  |       | 14.6  | 14.6  | 123.5 | 119.1 | 119.1 | 108.7 | 102.0 | 102.0 |
| Actuated g/C Ratio      |                                                                                    | 0.10  | 0.10  |       | 0.10  | 0.10  | 0.82  | 0.79  | 0.79  | 0.72  | 0.68  | 0.68  |
| v/c Ratio               |                                                                                    | 0.64  | 0.64  |       | 0.08  | 0.02  | 0.61  | 0.37  | 0.01  | 0.03  | 0.71  | 0.05  |
| Control Delay           |                                                                                    | 85.5  | 29.1  |       | 59.9  | 0.2   | 33.5  | 4.7   | 0.0   | 4.2   | 14.8  | 1.0   |
| Queue Delay             |                                                                                    | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.1   | 0.0   |
| Total Delay             |                                                                                    | 85.5  | 29.1  |       | 59.9  | 0.2   | 33.5  | 4.7   | 0.0   | 4.2   | 14.9  | 1.0   |
| LOS                     |                                                                                    | F     | C     |       | E     | A     | C     | A     | A     | A     | B     | A     |
| Approach Delay          |                                                                                    | 47.4  |       |       | 38.8  |       |       | 8.7   |       |       | 14.4  |       |
| Approach LOS            |                                                                                    | D     |       |       | D     |       |       | A     |       |       | B     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 15.0

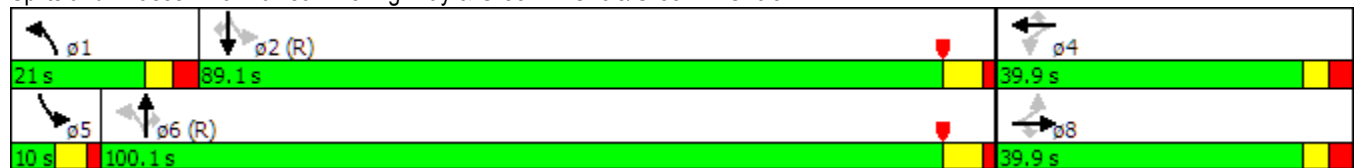
Intersection LOS: B

Intersection Capacity Utilization 78.5%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle



## Lanier Tract DRI

## 10: Dawsonville Highway &amp; Shallowford Rd/Best Buy

phase two a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |                                                                                   |  |  |   |  |  |  |  |  |
| Volume (vph)               | 162                                                                               | 2                                                                                 | 9                                                                                 | 2                                                                                 | 4                                                                                 | 3                                                                                 | 11                                                                                  | 864                                                                                 | 14                                                                                  | 1                                                                                   | 1425                                                                                | 387                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | -1%                                                                               |                                                                                   |                                                                                   | 10%                                                                               |                                                                                   |                                                                                     | -4%                                                                                 |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 350                                                                               |                                                                                   | 350                                                                               | 0                                                                                 |                                                                                   | 0                                                                                 | 350                                                                                 |                                                                                     | 150                                                                                 | 265                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 100                                                                               |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             | 0.953                                                                             |                                                                                   |                                                                                   | 0.982                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1723                                                                              | 1729                                                                              | 1623                                                                              | 0                                                                                 | 1773                                                                              | 1534                                                                              | 1841                                                                                | 3646                                                                                | 1647                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             | 0.953                                                                             |                                                                                   |                                                                                   | 0.982                                                                             |                                                                                   | 0.115                                                                               |                                                                                     |                                                                                     | 0.273                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1723                                                                              | 1729                                                                              | 1623                                                                              | 0                                                                                 | 1773                                                                              | 1534                                                                              | 223                                                                                 | 3646                                                                                | 1647                                                                                | 521                                                                                 | 3592                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 113                                                                               |                                                                                   |                                                                                   | 119                                                                               |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     | 219                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 653                                                                               |                                                                                   |                                                                                   | 178                                                                               |                                                                                   |                                                                                     | 957                                                                                 |                                                                                     |                                                                                     | 778                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 9.9                                                                               |                                                                                   |                                                                                   | 4.9                                                                               |                                                                                   |                                                                                     | 14.5                                                                                |                                                                                     |                                                                                     | 11.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.84                                                                              | 0.84                                                                              | 0.84                                                                              | 0.56                                                                              | 0.56                                                                              | 0.56                                                                              | 0.83                                                                                | 0.83                                                                                | 0.83                                                                                | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 193                                                                               | 2                                                                                 | 11                                                                                | 4                                                                                 | 7                                                                                 | 5                                                                                 | 13                                                                                  | 1041                                                                                | 17                                                                                  | 1                                                                                   | 1532                                                                                | 416                                                                                 |
| Shared Lane Traffic (%)    | 50%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 96                                                                                | 99                                                                                | 11                                                                                | 0                                                                                 | 11                                                                                | 5                                                                                 | 13                                                                                  | 1041                                                                                | 17                                                                                  | 1                                                                                   | 1532                                                                                | 416                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 0.99                                                                              | 0.99                                                                              | 0.99                                                                              | 1.07                                                                              | 1.07                                                                              | 1.07                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Split                                                                             | NA                                                                                | Perm                                                                              | Split                                                                             | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | Perm                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 3                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 3                                                                                 | 3                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 36.7                                                                              | 36.7                                                                              | 36.7                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                                | 28.8                                                                                | 28.8                                                                                | 30.8                                                                                | 30.8                                                                                | 30.8                                                                                |

# Lanier Tract DRI

## 10: Dawsonville Highway & Shallowford Rd/Best Buy

phase two a.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Total Split (s)         | 36.7                                                                              | 36.7                                                                              | 36.7                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                               | 74.4                                                                                | 74.4                                                                                | 63.6                                                                                | 63.6                                                                                | 63.6                                                                                |
| Total Split (%)         | 24.5%                                                                             | 24.5%                                                                             | 24.5%                                                                             | 25.9%                                                                             | 25.9%                                                                             | 25.9%                                                                             | 7.2%                                                                               | 49.6%                                                                               | 49.6%                                                                               | 42.4%                                                                               | 42.4%                                                                               | 42.4%                                                                               |
| Maximum Green (s)       | 30.0                                                                              | 30.0                                                                              | 30.0                                                                              | 33.0                                                                              | 33.0                                                                              | 33.0                                                                              | 5.0                                                                                | 67.6                                                                                | 67.6                                                                                | 56.8                                                                                | 56.8                                                                                | 56.8                                                                                |
| Yellow Time (s)         | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 4.9                                                                                 | 4.9                                                                                 | 4.9                                                                                 | 4.9                                                                                 | 4.9                                                                                 |
| All-Red Time (s)        | 2.2                                                                               | 2.2                                                                               | 2.2                                                                               | 2.9                                                                               | 2.9                                                                               | 2.9                                                                               | 2.8                                                                                | 1.9                                                                                 | 1.9                                                                                 | 1.9                                                                                 | 1.9                                                                                 | 1.9                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.7                                                                               | 6.7                                                                               | 6.7                                                                               |                                                                                   | 5.9                                                                               | 5.9                                                                               | 5.8                                                                                | 6.8                                                                                 | 6.8                                                                                 | 6.8                                                                                 | 6.8                                                                                 | 6.8                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lag                                                                               | Lead                                                                               |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 | Lag                                                                                 |
| Lead-Lag Optimize?      | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                                |                                                                                     |                                                                                     | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                               | C-Min                                                                               | C-Min                                                                               | C-Min                                                                               | C-Min                                                                               | C-Min                                                                               |
| Walk Time (s)           | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                    | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |
| Flash Dont Walk (s)     | 26.0                                                                              | 26.0                                                                              | 26.0                                                                              | 29.0                                                                              | 29.0                                                                              | 29.0                                                                              |                                                                                    | 18.0                                                                                | 18.0                                                                                | 20.0                                                                                | 20.0                                                                                | 20.0                                                                                |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Act Effect Green (s)    | 13.9                                                                              | 13.9                                                                              | 13.9                                                                              |                                                                                   | 6.5                                                                               | 6.5                                                                               | 118.2                                                                              | 117.2                                                                               | 117.2                                                                               | 112.4                                                                               | 112.4                                                                               | 112.4                                                                               |
| Actuated g/C Ratio      | 0.09                                                                              | 0.09                                                                              | 0.09                                                                              |                                                                                   | 0.04                                                                              | 0.04                                                                              | 0.79                                                                               | 0.78                                                                                | 0.78                                                                                | 0.75                                                                                | 0.75                                                                                | 0.75                                                                                |
| v/c Ratio               | 0.60                                                                              | 0.62                                                                              | 0.04                                                                              |                                                                                   | 0.14                                                                              | 0.03                                                                              | 0.05                                                                               | 0.37                                                                                | 0.01                                                                                | 0.00                                                                                | 0.57                                                                                | 0.33                                                                                |
| Control Delay           | 80.2                                                                              | 81.2                                                                              | 0.3                                                                               |                                                                                   | 72.5                                                                              | 0.3                                                                               | 6.1                                                                                | 6.5                                                                                 | 0.0                                                                                 | 7.0                                                                                 | 11.6                                                                                | 4.6                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.5                                                                                 | 0.0                                                                                 |
| Total Delay             | 80.2                                                                              | 81.2                                                                              | 0.3                                                                               |                                                                                   | 72.5                                                                              | 0.3                                                                               | 6.1                                                                                | 6.5                                                                                 | 0.0                                                                                 | 7.0                                                                                 | 12.0                                                                                | 4.6                                                                                 |
| LOS                     | F                                                                                 | F                                                                                 | A                                                                                 |                                                                                   | E                                                                                 | A                                                                                 | A                                                                                  | A                                                                                   | A                                                                                   | A                                                                                   | B                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 76.4                                                                              |                                                                                   |                                                                                   | 49.9                                                                              |                                                                                   |                                                                                    | 6.4                                                                                 |                                                                                     |                                                                                     | 10.4                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | E                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 45 (30%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.62

Intersection Signal Delay: 13.5

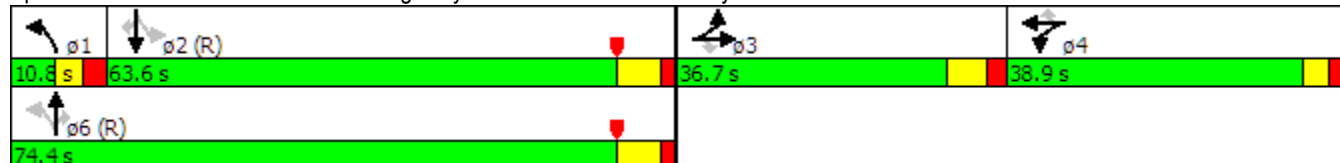
Intersection LOS: B

Intersection Capacity Utilization 63.9%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 10: Dawsonville Highway & Shallowford Rd/Best Buy



Lanier Tract DRI  
1: Sportsman Club Road & Strickland Drive

phase two p.m.

| Intersection             |        |       |        |      |        |           |
|--------------------------|--------|-------|--------|------|--------|-----------|
| Int Delay, s/veh         | 3.2    |       |        |      |        |           |
|                          |        |       |        |      |        |           |
| Movement                 | WBL    | WBR   |        | NBT  | NBR    | SBL SBT   |
| Vol, veh/h               | 24     | 0     |        | 32   | 28     | 0 25      |
| Conflicting Peds, #/hr   | 0      | 0     |        | 0    | 0      | 0 0       |
| Sign Control             | Stop   | Stop  |        | Free | Free   | Free Free |
| RT Channelized           | -      | None  |        | -    | None   | - None    |
| Storage Length           | 0      | -     |        | -    | -      | - -       |
| Veh in Median Storage, # | 0      | -     |        | 0    | -      | - 0       |
| Grade, %                 | 0      | -     |        | 0    | -      | - 0       |
| Peak Hour Factor         | 44     | 44    |        | 86   | 86     | 82 82     |
| Heavy Vehicles, %        | 2      | 2     |        | 2    | 2      | 2 2       |
| Mvmt Flow                | 55     | 0     |        | 37   | 33     | 0 30      |
|                          |        |       |        |      |        |           |
| Major/Minor              | Minor1 |       | Major1 |      | Major2 |           |
| Conflicting Flow All     | 83     | 53    |        | 0    | 0      | 70 0      |
| Stage 1                  | 53     | -     |        | -    | -      | - -       |
| Stage 2                  | 30     | -     |        | -    | -      | - -       |
| Critical Hdwy            | 6.42   | 6.22  |        | -    | -      | 4.12 -    |
| Critical Hdwy Stg 1      | 5.42   | -     |        | -    | -      | - -       |
| Critical Hdwy Stg 2      | 5.42   | -     |        | -    | -      | - -       |
| Follow-up Hdwy           | 3.518  | 3.318 |        | -    | -      | 2.218 -   |
| Pot Cap-1 Maneuver       | 919    | 1014  |        | -    | -      | 1531 -    |
| Stage 1                  | 970    | -     |        | -    | -      | - -       |
| Stage 2                  | 993    | -     |        | -    | -      | - -       |
| Platoon blocked, %       |        |       |        | -    | -      | -         |
| Mov Cap-1 Maneuver       | 919    | 1014  |        | -    | -      | 1531 -    |
| Mov Cap-2 Maneuver       | 919    | -     |        | -    | -      | - -       |
| Stage 1                  | 970    | -     |        | -    | -      | - -       |
| Stage 2                  | 993    | -     |        | -    | -      | - -       |
|                          |        |       |        |      |        |           |
| Approach                 | WB     |       | NB     |      | SB     |           |
| HCM Control Delay, s     | 9.2    |       | 0      |      | 0      |           |
| HCM LOS                  | A      |       |        |      |        |           |
|                          |        |       |        |      |        |           |
| Minor Lane/Major Mvmt    | NBT    | NBR   | WBLn1  | SBL  | SBT    |           |
| Capacity (veh/h)         | -      | -     | 919    | 1531 | -      |           |
| HCM Lane V/C Ratio       | -      | -     | 0.059  | -    | -      |           |
| HCM Control Delay (s)    | -      | -     | 9.2    | 0    | -      |           |
| HCM Lane LOS             | -      | -     | A      | A    | -      |           |
| HCM 95th %tile Q(veh)    | -      | -     | 0.2    | 0    | -      |           |

Lanier Tract DRI  
2: GA 53 & Sportsman Club Road

phase two p.m.

| Intersection               |        |                        |      |                            |      |      |                                |           |      |           |      |      |
|----------------------------|--------|------------------------|------|----------------------------|------|------|--------------------------------|-----------|------|-----------|------|------|
| Int Delay, s/veh           |        | 74.3                   |      |                            |      |      |                                |           |      |           |      |      |
|                            |        |                        |      |                            |      |      |                                |           |      |           |      |      |
| Movement                   | EBL    | EBT                    | EBR  | WBL                        | WBT  | WBR  | NBL                            | NBT       | NBR  | SBL       | SBT  | SBR  |
| Vol, veh/h                 | 22     | 1201                   | 0    | 26                         | 1914 | 34   | 0                              | 0         | 0    | 42        | 0    | 15   |
| Conflicting Peds, #/hr     | 0      | 0                      | 0    | 0                          | 0    | 0    | 0                              | 0         | 0    | 0         | 0    | 0    |
| Sign Control               | Free   | Free                   | Free | Free                       | Free | Free | Stop                           | Stop      | Stop | Stop      | Stop | Stop |
| RT Channelized             | -      | -                      | None | -                          | -    | None | -                              | -         | None | -         | -    | None |
| Storage Length             | 0      | -                      | -    | 0                          | -    | -    | -                              | -         | -    | -         | -    | -    |
| Veh in Median Storage, #   | -      | 0                      | -    | -                          | 0    | -    | -                              | 0         | -    | -         | 0    | -    |
| Grade, %                   | -      | 0                      | -    | -                          | 0    | -    | -                              | 0         | -    | -         | 0    | -    |
| Peak Hour Factor           | 95     | 95                     | 95   | 96                         | 96   | 96   | 92                             | 92        | 92   | 75        | 75   | 75   |
| Heavy Vehicles, %          | 2      | 2                      | 2    | 2                          | 2    | 2    | 2                              | 2         | 2    | 2         | 2    | 2    |
| Mvmt Flow                  | 23     | 1264                   | 0    | 27                         | 1994 | 35   | 0                              | 0         | 0    | 56        | 0    | 20   |
|                            |        |                        |      |                            |      |      |                                |           |      |           |      |      |
| Major/Minor                | Major1 |                        |      | Major2                     |      |      | Minor1                         |           |      | Minor2    |      |      |
| Conflicting Flow All       | 2029   | 0                      | 0    | 1264                       | 0    | 0    | 2362                           | 3394      | 632  | 2744      | 3377 | 1015 |
| Stage 1                    | -      | -                      | -    | -                          | -    | -    | 1311                           | 1311      | -    | 2066      | 2066 | -    |
| Stage 2                    | -      | -                      | -    | -                          | -    | -    | 1051                           | 2083      | -    | 678       | 1311 | -    |
| Critical Hdwy              | 4.14   | -                      | -    | 4.14                       | -    | -    | 7.54                           | 6.54      | 6.94 | 7.54      | 6.54 | 6.94 |
| Critical Hdwy Stg 1        | -      | -                      | -    | -                          | -    | -    | 6.54                           | 5.54      | -    | 6.54      | 5.54 | -    |
| Critical Hdwy Stg 2        | -      | -                      | -    | -                          | -    | -    | 6.54                           | 5.54      | -    | 6.54      | 5.54 | -    |
| Follow-up Hdwy             | 2.22   | -                      | -    | 2.22                       | -    | -    | 3.52                           | 4.02      | 3.32 | 3.52      | 4.02 | 3.32 |
| Pot Cap-1 Maneuver         | 276    | -                      | -    | 546                        | -    | -    | 19                             | 7         | 423  | ~ 9       | 7    | 236  |
| Stage 1                    | -      | -                      | -    | -                          | -    | -    | 168                            | 227       | -    | 56        | 95   | -    |
| Stage 2                    | -      | -                      | -    | -                          | -    | -    | 243                            | 94        | -    | 408       | 227  | -    |
| Platoon blocked, %         |        | -                      | -    |                            | -    | -    |                                |           |      |           |      |      |
| Mov Cap-1 Maneuver         | 276    | -                      | -    | 546                        | -    | -    | 16                             | 6         | 423  | ~ 8       | 6    | 236  |
| Mov Cap-2 Maneuver         | -      | -                      | -    | -                          | -    | -    | 16                             | 6         | -    | ~ 8       | 6    | -    |
| Stage 1                    | -      | -                      | -    | -                          | -    | -    | 154                            | 208       | -    | ~ 51      | 90   | -    |
| Stage 2                    | -      | -                      | -    | -                          | -    | -    | 211                            | 89        | -    | 374       | 208  | -    |
|                            |        |                        |      |                            |      |      |                                |           |      |           |      |      |
| Approach                   | EB     |                        |      | WB                         |      |      | NB                             |           |      | SB        |      |      |
| HCM Control Delay, s       | 0.3    |                        |      | 0.2                        |      |      | 0                              |           |      | \$ 3330.7 |      |      |
| HCM LOS                    |        |                        |      |                            |      |      | A                              |           |      | F         |      |      |
|                            |        |                        |      |                            |      |      |                                |           |      |           |      |      |
| Minor Lane/Major Mvmt      | NBLn1  | EBL                    | EBT  | EBR                        | WBL  | WBT  | WBR                            | SBLn1     |      |           |      |      |
| Capacity (veh/h)           | -      | 276                    | -    | -                          | 546  | -    | -                              | 11        |      |           |      |      |
| HCM Lane V/C Ratio         | -      | 0.084                  | -    | -                          | 0.05 | -    | -                              | 6.909     |      |           |      |      |
| HCM Control Delay (s)      | 0      | 19.2                   | -    | -                          | 11.9 | -    |                                | \$ 3330.7 |      |           |      |      |
| HCM Lane LOS               | A      | C                      | -    | -                          | B    | -    | -                              | F         |      |           |      |      |
| HCM 95th %tile Q(veh)      | -      | 0.3                    | -    | -                          | 0.2  | -    | -                              | 10.8      |      |           |      |      |
| Notes                      |        |                        |      |                            |      |      |                                |           |      |           |      |      |
| ~: Volume exceeds capacity |        | \$: Delay exceeds 300s |      | +: Computation Not Defined |      |      | *: All major volume in platoon |           |      |           |      |      |

| Intersection     |     |  |  |  |  |  |  |  |  |  |  |  |
|------------------|-----|--|--|--|--|--|--|--|--|--|--|--|
| Int Delay, s/veh | 4.5 |  |  |  |  |  |  |  |  |  |  |  |

| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol, veh/h               | 12   | 0    | 52   | 2    | 0    | 11   | 68   | 1896 | 17   | 10   | 1298 | 15   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | 0    | -    | 0    | 0    | -    | 0    | 0    | -    | -    | 0    | -    | 0    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 76   | 76   | 76   | 80   | 80   | 80   | 95   | 95   | 95   | 100  | 100  | 100  |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 16   | 0    | 68   | 2    | 0    | 14   | 72   | 1996 | 18   | 10   | 1298 | 15   |

| Major/Minor          | Minor2 |      |      | Minor1 |      |      | Major1 |   |   | Major2 |   |   |
|----------------------|--------|------|------|--------|------|------|--------|---|---|--------|---|---|
| Conflicting Flow All | 2459   | 3475 | 649  | 2817   | 3466 | 1007 | 1298   | 0 | 0 | 2014   | 0 | 0 |
| Stage 1              | 1318   | 1318 | -    | 2148   | 2148 | -    | -      | - | - | -      | - | - |
| Stage 2              | 1141   | 2157 | -    | 669    | 1318 | -    | -      | - | - | -      | - | - |
| Critical Hdwy        | 7.54   | 6.54 | 6.94 | 7.54   | 6.54 | 6.94 | 4.14   | - | - | 4.14   | - | - |
| Critical Hdwy Stg 1  | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    | -      | - | - | -      | - | - |
| Critical Hdwy Stg 2  | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    | -      | - | - | -      | - | - |
| Follow-up Hdwy       | 3.52   | 4.02 | 3.32 | 3.52   | 4.02 | 3.32 | 2.22   | - | - | 2.22   | - | - |
| Pot Cap-1 Maneuver   | 16     | 6    | 412  | 8      | 7    | 239  | 530    | - | - | 279    | - | - |
| Stage 1              | 166    | 225  | -    | 49     | 87   | -    | -      | - | - | -      | - | - |
| Stage 2              | 214    | 86   | -    | 413    | 225  | -    | -      | - | - | -      | - | - |
| Platoon blocked, %   |        |      |      |        |      |      |        | - | - |        | - | - |
| Mov Cap-1 Maneuver   | ~ 13   | 5    | 412  | 6      | 6    | 239  | 530    | - | - | 279    | - | - |
| Mov Cap-2 Maneuver   | ~ 13   | 5    | -    | 6      | 6    | -    | -      | - | - | -      | - | - |
| Stage 1              | 143    | 217  | -    | 42     | 75   | -    | -      | - | - | -      | - | - |
| Stage 2              | 174    | 74   | -    | 332    | 217  | -    | -      | - | - | -      | - | - |

| Approach             | EB  | WB    | NB  | SB  |
|----------------------|-----|-------|-----|-----|
| HCM Control Delay, s | 148 | 146.1 | 0.4 | 0.1 |
| HCM LOS              | F   | F     |     |     |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1    | EBLn2 | WBLn1    | WBLn2 | SBL   | SBT | SBR |
|-----------------------|-------|-----|-----|----------|-------|----------|-------|-------|-----|-----|
| Capacity (veh/h)      | 530   | -   | -   | 13       | 412   | 6        | 239   | 279   | -   | -   |
| HCM Lane V/C Ratio    | 0.135 | -   | -   | 1.215    | 0.166 | 0.417    | 0.058 | 0.036 | -   | -   |
| HCM Control Delay (s) | 12.8  | -   | -   | \$ 722.2 | 15.5  | \$ 833.9 | 21    | 18.4  | -   | -   |
| HCM Lane LOS          | B     | -   | -   | F        | C     | F        | C     | C     | -   | -   |
| HCM 95th %tile Q(veh) | 0.5   | -   | -   | 2.6      | 0.6   | 0.8      | 0.2   | 0.1   | -   | -   |

| Notes                      |                        |                            |                                |  |  |  |  |  |  |  |
|----------------------------|------------------------|----------------------------|--------------------------------|--|--|--|--|--|--|--|
| ~: Volume exceeds capacity | \$: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |  |  |  |  |  |  |  |

Lanier Tract DRI  
4: Canterbury Road & GA 53

phase two p.m.

| Intersection     |       |  |  |  |  |  |  |  |  |  |  |  |
|------------------|-------|--|--|--|--|--|--|--|--|--|--|--|
| Int Delay, s/veh | 852.3 |  |  |  |  |  |  |  |  |  |  |  |

| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol, veh/h               | 8    | 0    | 31   | 116  | 0    | 92   | 123  | 1860 | 128  | 68   | 1238 | 15   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | 0    | -    | 0    | 0    | -    | 0    | 0    | -    | 0    | 0    | -    | 0    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 80   | 80   | 80   | 70   | 70   | 70   | 96   | 96   | 96   | 96   | 96   | 96   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 10   | 0    | 39   | 166  | 0    | 131  | 128  | 1938 | 133  | 71   | 1290 | 16   |

| Major/Minor          | Minor2 |      |      | Minor1 |      |      | Major1 |   |   | Major2 |   |   |
|----------------------|--------|------|------|--------|------|------|--------|---|---|--------|---|---|
| Conflicting Flow All | 2656   | 3625 | 645  | 2980   | 3625 | 969  | 1290   | 0 | 0 | 1938   | 0 | 0 |
| Stage 1              | 1431   | 1431 | -    | 2194   | 2194 | -    | -      | - | - | -      | - | - |
| Stage 2              | 1225   | 2194 | -    | 786    | 1431 | -    | -      | - | - | -      | - | - |
| Critical Hdwy        | 7.54   | 6.54 | 6.94 | 7.54   | 6.54 | 6.94 | 4.14   | - | - | 4.14   | - | - |
| Critical Hdwy Stg 1  | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    | -      | - | - | -      | - | - |
| Critical Hdwy Stg 2  | 6.54   | 5.54 | -    | 6.54   | 5.54 | -    | -      | - | - | -      | - | - |
| Follow-up Hdwy       | 3.52   | 4.02 | 3.32 | 3.52   | 4.02 | 3.32 | 2.22   | - | - | 2.22   | - | - |
| Pot Cap-1 Maneuver   | 11     | 5    | 415  | ~ 6    | 5    | 253  | 533    | - | - | 299    | - | - |
| Stage 1              | 141    | 198  | -    | ~ 46   | 82   | -    | -      | - | - | -      | - | - |
| Stage 2              | 190    | 82   | -    | 351    | 198  | -    | -      | - | - | -      | - | - |
| Platoon blocked, %   |        |      |      |        |      |      | -      | - | - | -      | - | - |
| Mov Cap-1 Maneuver   | ~ 4    | 3    | 415  | ~ 4    | 3    | 253  | 533    | - | - | 299    | - | - |
| Mov Cap-2 Maneuver   | ~ 4    | 3    | -    | ~ 4    | 3    | -    | -      | - | - | -      | - | - |
| Stage 1              | 107    | 151  | -    | ~ 35   | 62   | -    | -      | - | - | -      | - | - |
| Stage 2              | 69     | 62   | -    | 243    | 151  | -    | -      | - | - | -      | - | - |

| Approach             | EB       | WB         | NB  | SB  |
|----------------------|----------|------------|-----|-----|
| HCM Control Delay, s | \$ 484.2 | \$ 11156.3 | 0.8 | 1.1 |
| HCM LOS              | F        | F          |     |     |

| Minor Lane/Major Mvmt | NBL  | NBT | NBR | EBLn1     | EBLn2 | WBLn1  | WBLn2 | SBL   | SBT | SBR |
|-----------------------|------|-----|-----|-----------|-------|--------|-------|-------|-----|-----|
| Capacity (veh/h)      | 533  | -   | -   | 4         | 415   | 4      | 253   | 299   | -   | -   |
| HCM Lane V/C Ratio    | 0.24 | -   | -   | 2.5       | 0.093 | 41.429 | 0.519 | 0.237 | -   | -   |
| HCM Control Delay (s) | 13.9 | -   | -   | \$ 2303.8 | 14.0  | 9977.6 | 33.7  | 20.7  | -   | -   |
| HCM Lane LOS          | B    | -   | -   | F         | B     | F      | D     | C     | -   | -   |
| HCM 95th %tile Q(veh) | 0.9  | -   | -   | 2.3       | 0.3   | 22.9   | 2.7   | 0.9   | -   | -   |

| Notes                      |                        |                            |                                |  |  |  |  |  |  |  |
|----------------------------|------------------------|----------------------------|--------------------------------|--|--|--|--|--|--|--|
| ~: Volume exceeds capacity | \$: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |  |  |  |  |  |  |  |

| Intersection             |        |        |       |        |      |      |
|--------------------------|--------|--------|-------|--------|------|------|
| Int Delay, s/veh         | 1      |        |       |        |      |      |
|                          |        |        |       |        |      |      |
|                          |        |        |       |        |      |      |
| Movement                 | EBL    | EBR    | NBL   | NBT    | SBT  | SBR  |
| Vol, veh/h               | 1      | 52     | 95    | 2401   | 1711 | 10   |
| Conflicting Peds, #/hr   | 0      | 0      | 0     | 0      | 0    | 0    |
| Sign Control             | Stop   | Stop   | Free  | Free   | Free | Free |
| RT Channelized           | -      | Yield  | -     | Yield  | -    | None |
| Storage Length           | 0      | 0      | 200   | -      | -    | 360  |
| Veh in Median Storage, # | 0      | -      | -     | 0      | 0    | -    |
| Grade, %                 | 0      | -      | -     | 1      | 0    | -    |
| Peak Hour Factor         | 71     | 71     | 99    | 99     | 98   | 98   |
| Heavy Vehicles, %        | 0      | 0      | 0     | 0      | 1    | 0    |
| Mvmt Flow                | 1      | 73     | 96    | 2425   | 1746 | 10   |
|                          |        |        |       |        |      |      |
| Major/Minor              | Minor2 | Major1 |       | Major2 |      |      |
| Conflicting Flow All     | 3151   | 874    | 1746  | 0      | -    | 0    |
| Stage 1                  | 1746   | -      | -     | -      | -    | -    |
| Stage 2                  | 1405   | -      | -     | -      | -    | -    |
| Critical Hdwy            | 6.8    | 6.9    | 4.1   | -      | -    | -    |
| Critical Hdwy Stg 1      | 5.8    | -      | -     | -      | -    | -    |
| Critical Hdwy Stg 2      | 5.8    | -      | -     | -      | -    | -    |
| Follow-up Hdwy           | 3.5    | 3.3    | 2.2   | -      | -    | -    |
| Pot Cap-1 Maneuver       | 9      | 297    | 364   | -      | -    | -    |
| Stage 1                  | 128    | -      | -     | -      | -    | -    |
| Stage 2                  | 196    | -      | -     | -      | -    | -    |
| Platoon blocked, %       |        |        |       | -      | -    | -    |
| Mov Cap-1 Maneuver       | 7      | 297    | 364   | -      | -    | -    |
| Mov Cap-2 Maneuver       | 7      | -      | -     | -      | -    | -    |
| Stage 1                  | 128    | -      | -     | -      | -    | -    |
| Stage 2                  | 144    | -      | -     | -      | -    | -    |
|                          |        |        |       |        |      |      |
| Approach                 | EB     | NB     |       | SB     |      |      |
| HCM Control Delay, s     | 32.3   | 0.7    |       | 0      |      |      |
| HCM LOS                  | D      |        |       |        |      |      |
|                          |        |        |       |        |      |      |
| Minor Lane/Major Mvmt    | NBL    | NBT    | EBLn1 | EBLn2  | SBT  | SBR  |
| Capacity (veh/h)         | 364    | -      | 7     | 297    | -    | -    |
| HCM Lane V/C Ratio       | 0.264  | -      | 0.201 | 0.247  | -    | -    |
| HCM Control Delay (s)    | 18.4   | -\$    | 620.4 | 21     | -    | -    |
| HCM Lane LOS             | C      | -      | F     | C      | -    | -    |
| HCM 95th %tile Q(veh)    | 1      | -      | 0.5   | 1      | -    | -    |



Lanier Tract DRI

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phase two p.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Volume (vph)               | 23                                                                                | 1                                                                                 | 106                                                                               | 98                                                                                | 8                                                                                 | 64                                                                                | 198                                                                                 | 2041                                                                                | 114                                                                                 | 31                                                                                  | 1448                                                                                | 3                                                                                   |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 2%                                                                                |                                                                                   |                                                                                   | -4%                                                                               |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 100                                                                                 |                                                                                     | 0                                                                                   | 140                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.890                                                                             |                                                                                   |                                                                                   | 0.949                                                                             |                                                                                   |                                                                                     | 0.992                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   | 0.991                                                                             |                                                                                   |                                                                                   | 0.972                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1659                                                                              | 0                                                                                 | 0                                                                                 | 1788                                                                              | 0                                                                                 | 1796                                                                                | 3563                                                                                | 0                                                                                   | 1814                                                                                | 3592                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.906                                                                             |                                                                                   |                                                                                   | 0.612                                                                             |                                                                                   | 0.099                                                                               |                                                                                     |                                                                                     | 0.040                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1517                                                                              | 0                                                                                 | 0                                                                                 | 1126                                                                              | 0                                                                                 | 187                                                                                 | 3563                                                                                | 0                                                                                   | 76                                                                                  | 3592                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 119                                                                               |                                                                                   |                                                                                   | 17                                                                                |                                                                                   |                                                                                     | 10                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 340                                                                               |                                                                                   |                                                                                   | 322                                                                               |                                                                                   |                                                                                     | 1002                                                                                |                                                                                     |                                                                                     | 1457                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.7                                                                               |                                                                                   |                                                                                   | 7.3                                                                               |                                                                                   |                                                                                     | 15.2                                                                                |                                                                                     |                                                                                     | 22.1                                                                                |                                                                                     |
| Peak Hour Factor           | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 26                                                                                | 1                                                                                 | 119                                                                               | 109                                                                               | 9                                                                                 | 71                                                                                | 206                                                                                 | 2126                                                                                | 119                                                                                 | 32                                                                                  | 1508                                                                                | 3                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 146                                                                               | 0                                                                                 | 0                                                                                 | 189                                                                               | 0                                                                                 | 206                                                                                 | 2245                                                                                | 0                                                                                   | 32                                                                                  | 1511                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 0.97                                                                              | 0.97                                                                              | 0.97                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 |                                                                                     | 0                                                                                   | 336                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 |                                                                                     | 0                                                                                   | 330                                                                                 |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                |                                                                                   | 20                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   |                                                                                     | 0                                                                                   | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 8                                                                                 | 8                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 10.6                                                                                | 23.0                                                                                |                                                                                     | 23.0                                                                                | 23.0                                                                                |                                                                                     |

# Lanier Tract DRI

## 5: GA 53 & Lanier Valley Dr/Ahaluna Dr

phase two p.m.

| Lane Group            | EBL   | EBT   | EBR | WBL   | WBT   | WBR | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
|-----------------------|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Total Split (s)       | 36.0  | 36.0  |     | 36.0  | 36.0  |     | 22.0  | 124.0 |     | 102.0 | 102.0 |     |
| Total Split (%)       | 22.5% | 22.5% |     | 22.5% | 22.5% |     | 13.8% | 77.5% |     | 63.8% | 63.8% |     |
| Maximum Green (s)     | 29.4  | 29.4  |     | 29.4  | 29.4  |     | 16.4  | 117.9 |     | 95.9  | 95.9  |     |
| Yellow Time (s)       | 4.0   | 4.0   |     | 4.0   | 4.0   |     | 3.0   | 4.5   |     | 4.5   | 4.5   |     |
| All-Red Time (s)      | 2.6   | 2.6   |     | 2.6   | 2.6   |     | 2.6   | 1.6   |     | 1.6   | 1.6   |     |
| Lost Time Adjust (s)  |       | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Lost Time (s)   |       | 6.6   |     |       | 6.6   |     | 5.6   | 6.1   |     | 6.1   | 6.1   |     |
| Lead/Lag              |       |       |     |       |       |     | Lead  |       |     | Lag   | Lag   |     |
| Lead-Lag Optimize?    |       |       |     |       |       |     | Yes   |       |     | Yes   | Yes   |     |
| Vehicle Extension (s) | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode           | None  | None  |     | None  | None  |     | None  | C-Max |     | C-Max | C-Max |     |
| Act Effect Green (s)  |       | 26.9  |     |       | 26.9  |     | 120.9 | 120.4 |     | 101.9 | 101.9 |     |
| Actuated g/C Ratio    |       | 0.17  |     |       | 0.17  |     | 0.76  | 0.75  |     | 0.64  | 0.64  |     |
| v/c Ratio             |       | 0.41  |     |       | 0.93  |     | 0.76  | 0.84  |     | 0.67  | 0.66  |     |
| Control Delay         |       | 17.7  |     |       | 106.1 |     | 36.4  | 15.3  |     | 86.6  | 20.9  |     |
| Queue Delay           |       | 0.0   |     |       | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay           |       | 17.7  |     |       | 106.1 |     | 36.4  | 15.3  |     | 86.6  | 20.9  |     |
| LOS                   |       | B     |     |       | F     |     | D     | B     |     | F     | C     |     |
| Approach Delay        |       | 17.7  |     |       | 106.1 |     |       | 17.0  |     |       | 22.3  |     |
| Approach LOS          |       | B     |     |       | F     |     |       | B     |     |       | C     |     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 129 (81%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 22.8

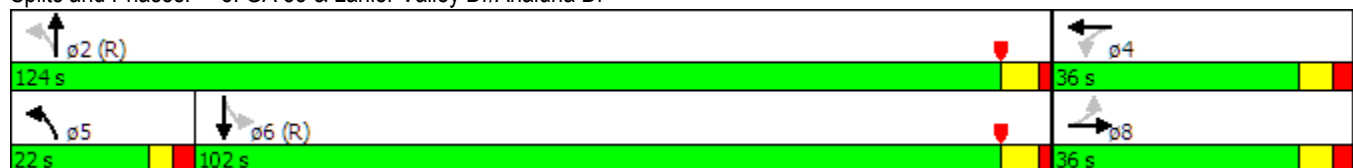
Intersection LOS: C

Intersection Capacity Utilization 96.3%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 5: GA 53 & Lanier Valley Dr/Ahaluna Dr



## Lanier Tract DRI

## 6: 53-Dawsonville Hwy &amp; Academy Sports

phase two p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |  |    |  |  |  |  |  |
| Volume (vph)               | 14                                                                                | 3                                                                                 | 66                                                                                | 130                                                                               | 8                                                                                 | 46                                                                                | 96                                                                                  | 2142                                                                                | 152                                                                                 | 21                                                                                  | 1503                                                                                | 30                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 4%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 70                                                                                | 200                                                                                 |                                                                                     | 170                                                                                 | 190                                                                                 |                                                                                     | 360                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1805                                                                              | 1900                                                                              | 1615                                                                              | 1769                                                                              | 1862                                                                              | 1583                                                                              | 1796                                                                                | 3592                                                                                | 1607                                                                                | 1805                                                                                | 3574                                                                                | 1615                                                                                |
| Flt Permitted              | 0.751                                                                             |                                                                                   |                                                                                   | 0.756                                                                             |                                                                                   |                                                                                   | 0.106                                                                               |                                                                                     |                                                                                     | 0.037                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1427                                                                              | 1900                                                                              | 1615                                                                              | 1408                                                                              | 1862                                                                              | 1583                                                                              | 200                                                                                 | 3592                                                                                | 1607                                                                                | 70                                                                                  | 3574                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 69                                                                                |                                                                                   |                                                                                   | 63                                                                                |                                                                                     |                                                                                     | 64                                                                                  |                                                                                     |                                                                                     | 64                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 262                                                                               |                                                                                   |                                                                                   | 246                                                                               |                                                                                   |                                                                                     | 1836                                                                                |                                                                                     |                                                                                     | 685                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.1                                                                               |                                                                                   |                                                                                   | 6.7                                                                               |                                                                                   |                                                                                     | 27.8                                                                                |                                                                                     |                                                                                     | 10.4                                                                                |                                                                                     |
| Peak Hour Factor           | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.80                                                                              | 0.80                                                                              | 0.80                                                                              | 0.98                                                                                | 0.98                                                                                | 0.98                                                                                | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 15                                                                                | 3                                                                                 | 69                                                                                | 162                                                                               | 10                                                                                | 58                                                                                | 98                                                                                  | 2186                                                                                | 155                                                                                 | 22                                                                                  | 1549                                                                                | 31                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 15                                                                                | 3                                                                                 | 69                                                                                | 162                                                                               | 10                                                                                | 58                                                                                | 98                                                                                  | 2186                                                                                | 155                                                                                 | 22                                                                                  | 1549                                                                                | 31                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                | 40                                                                                | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 2                                                                                   |                                                                                     | 2                                                                                   | 6                                                                                   |                                                                                     | 6                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 42.0                                                                              | 42.0                                                                              | 42.0                                                                              | 42.4                                                                              | 42.4                                                                              | 42.4                                                                              | 11.4                                                                                | 30.3                                                                                | 30.3                                                                                | 11.0                                                                                | 29.3                                                                                | 29.3                                                                                |

# Lanier Tract DRI

## 6: 53-Dawsonville Hwy & Academy Sports

phase two p.m.

|                         |  |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Total Split (s)         | 42.4                                                                               | 42.4  | 42.4  | 42.4  | 42.4  | 42.4  | 16.6  | 106.6 | 106.6 | 11.0  | 101.0 | 101.0 |
| Total Split (%)         | 26.5%                                                                              | 26.5% | 26.5% | 26.5% | 26.5% | 26.5% | 10.4% | 66.6% | 66.6% | 6.9%  | 63.1% | 63.1% |
| Maximum Green (s)       | 36.0                                                                               | 36.0  | 36.0  | 36.0  | 36.0  | 36.0  | 10.2  | 100.4 | 100.4 | 5.0   | 94.8  | 94.8  |
| Yellow Time (s)         | 3.4                                                                                | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 4.3   | 4.3   | 3.0   | 4.3   | 4.3   |
| All-Red Time (s)        | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 1.9   | 1.9   | 3.0   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.4                                                                                | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.4   | 6.2   | 6.2   | 6.0   | 6.2   | 6.2   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None  | C-Max | C-Max |
| Walk Time (s)           | 4.0                                                                                | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |       | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 23.0                                                                               | 23.0  | 23.0  | 32.0  | 32.0  | 32.0  |       | 20.0  | 20.0  |       | 19.0  | 19.0  |
| Pedestrian Calls (#/hr) | 0                                                                                  | 0     | 0     | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Act Effect Green (s)    | 23.7                                                                               | 23.7  | 23.7  | 23.7  | 23.7  | 23.7  | 121.5 | 116.4 | 116.4 | 115.5 | 109.4 | 109.4 |
| Actuated g/C Ratio      | 0.15                                                                               | 0.15  | 0.15  | 0.15  | 0.15  | 0.15  | 0.76  | 0.73  | 0.73  | 0.72  | 0.68  | 0.68  |
| v/c Ratio               | 0.07                                                                               | 0.01  | 0.23  | 0.78  | 0.04  | 0.20  | 0.42  | 0.84  | 0.13  | 0.19  | 0.63  | 0.03  |
| Control Delay           | 55.8                                                                               | 53.3  | 13.0  | 89.1  | 54.6  | 11.7  | 14.6  | 17.5  | 7.3   | 10.4  | 13.2  | 0.0   |
| Queue Delay             | 0.0                                                                                | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.1   | 0.0   |
| Total Delay             | 55.8                                                                               | 53.3  | 13.0  | 89.1  | 54.6  | 11.7  | 14.6  | 17.5  | 7.3   | 10.4  | 13.4  | 0.0   |
| LOS                     | E                                                                                  | D     | B     | F     | D     | B     | B     | B     | A     | B     | B     | A     |
| Approach Delay          |                                                                                    | 21.8  |       |       | 68.1  |       |       | 16.7  |       |       | 13.1  |       |
| Approach LOS            |                                                                                    | C     |       |       | E     |       |       | B     |       |       | B     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 120 (75%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 145

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 18.2

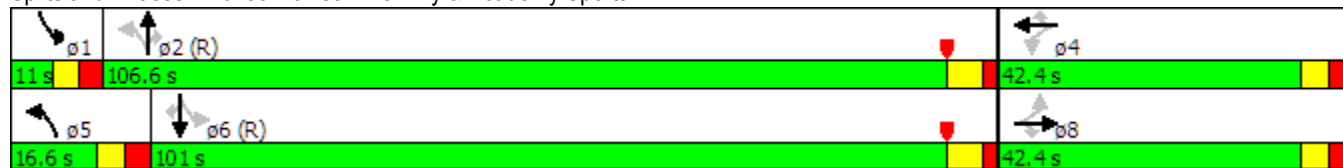
Intersection LOS: B

Intersection Capacity Utilization 92.7%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 6: 53-Dawsonville Hwy & Academy Sports



## Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 &amp; McEver Road/McEver

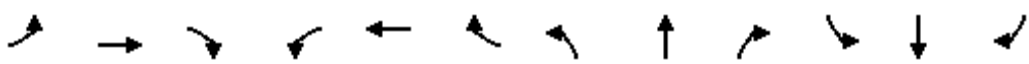
phase two p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |  |  |                                                                                   |   |  |  |  |  |  |
| Volume (vph)               | 996                                                                               | 235                                                                               | 426                                                                               | 96                                                                                | 100                                                                               | 93                                                                                | 478                                                                                 | 1632                                                                                | 51                                                                                  | 71                                                                                  | 1249                                                                                | 594                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 1%                                                                                |                                                                                   |                                                                                   | 5%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 180                                                                               |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 310                                                                                 |                                                                                     | 185                                                                                 | 255                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 50                                                                                |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.951                                                                             | 0.850                                                                             |                                                                                   | 0.928                                                                             |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 3484                                                                              | 1708                                                                              | 1527                                                                              | 1760                                                                              | 1719                                                                              | 0                                                                                 | 3484                                                                                | 3592                                                                                | 1607                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   | 0.432                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 3484                                                                              | 1708                                                                              | 1527                                                                              | 800                                                                               | 1719                                                                              | 0                                                                                 | 3484                                                                                | 3592                                                                                | 1607                                                                                | 1814                                                                                | 3592                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 18                                                                                | 302                                                                               |                                                                                   | 28                                                                                |                                                                                   |                                                                                     |                                                                                     | 172                                                                                 |                                                                                     |                                                                                     | 323                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 580                                                                               |                                                                                   |                                                                                   | 331                                                                               |                                                                                   |                                                                                     | 921                                                                                 |                                                                                     |                                                                                     | 1504                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 8.8                                                                               |                                                                                   |                                                                                   | 9.0                                                                               |                                                                                   |                                                                                     | 14.0                                                                                |                                                                                     |                                                                                     | 22.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.86                                                                              | 0.86                                                                              | 0.86                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 1048                                                                              | 247                                                                               | 448                                                                               | 112                                                                               | 116                                                                               | 108                                                                               | 493                                                                                 | 1682                                                                                | 53                                                                                  | 78                                                                                  | 1373                                                                                | 653                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   | 27%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 1048                                                                              | 368                                                                               | 327                                                                               | 112                                                                               | 224                                                                               | 0                                                                                 | 493                                                                                 | 1682                                                                                | 53                                                                                  | 78                                                                                  | 1373                                                                                | 653                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 24                                                                                |                                                                                   |                                                                                   | 24                                                                                |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.03                                                                              | 1.03                                                                              | 1.03                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   | 1                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   | 40                                                                                  | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                | 40                                                                                |                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   | 40                                                                                  | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                             | NA                                                                                |                                                                                   | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 8                                                                                 |                                                                                   | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 8                                                                                 | 8                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 13.2                                                                              | 50.2                                                                              | 50.2                                                                              | 11.6                                                                              | 48.2                                                                              |                                                                                   | 13.4                                                                                | 35.6                                                                                | 35.6                                                                                | 12.9                                                                                | 44.6                                                                                | 44.6                                                                                |

# Lanier Tract DRI

## 8: Dawsonville Highway/GA 53 & McEver Road/McEver

phase two p.m.

|                         |  |       |       |      |       |     |       |       |       |      |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|------|-------|-----|-------|-------|-------|------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL  | WBT   | WBR | NBL   | NBT   | NBR   | SBL  | SBT   | SBR   |
| Total Split (s)         | 34.0                                                                               | 68.2  | 68.2  | 14.0 | 48.2  |     | 22.0  | 64.8  | 64.8  | 13.0 | 55.8  | 55.8  |
| Total Split (%)         | 21.3%                                                                              | 42.6% | 42.6% | 8.8% | 30.1% |     | 13.8% | 40.5% | 40.5% | 8.1% | 34.9% | 34.9% |
| Maximum Green (s)       | 26.7                                                                               | 60.9  | 60.9  | 7.5  | 40.9  |     | 14.5  | 58.2  | 58.2  | 5.8  | 49.2  | 49.2  |
| Yellow Time (s)         | 4.3                                                                                | 4.3   | 4.3   | 3.5  | 4.3   |     | 4.5   | 4.4   | 4.4   | 4.2  | 4.4   | 4.4   |
| All-Red Time (s)        | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 2.2   | 2.2   | 3.0  | 2.2   | 2.2   |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   | 0.0   | 0.0  | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Lost Time (s)     | 7.3                                                                                | 7.3   | 7.3   | 6.5  | 7.3   |     | 7.5   | 6.6   | 6.6   | 7.2  | 6.6   | 6.6   |
| Lead/Lag                | Lead                                                                               | Lag   | Lag   | Lead | Lag   |     | Lag   | Lag   | Lag   | Lead | Lead  | Lead  |
| Lead-Lag Optimize?      | Yes                                                                                | Yes   | Yes   | Yes  | Yes   |     | Yes   | Yes   | Yes   | Yes  | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0  | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None | None  |     | None  | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s)           |                                                                                    | 4.0   | 4.0   |      | 4.0   |     |       | 4.0   | 4.0   |      | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    | 38.0  | 38.0  |      | 36.0  |     |       | 25.0  | 25.0  |      | 34.0  | 34.0  |
| Pedestrian Calls (#/hr) |                                                                                    | 0     | 0     |      | 0     |     |       | 0     | 0     |      | 0     | 0     |
| Act Effect Green (s)    | 26.7                                                                               | 43.9  | 43.9  | 32.2 | 23.9  |     | 14.5  | 65.6  | 65.6  | 15.4 | 66.2  | 66.2  |
| Actuated g/C Ratio      | 0.17                                                                               | 0.27  | 0.27  | 0.20 | 0.15  |     | 0.09  | 0.41  | 0.41  | 0.10 | 0.41  | 0.41  |
| v/c Ratio               | 1.80                                                                               | 0.77  | 0.51  | 0.54 | 0.80  |     | 1.57  | 1.14  | 0.07  | 0.45 | 0.92  | 0.76  |
| Control Delay           | 403.8                                                                              | 61.1  | 8.7   | 47.9 | 77.3  |     | 313.6 | 125.0 | 0.1   | 65.4 | 68.6  | 41.7  |
| Queue Delay             | 0.0                                                                                | 58.4  | 3.3   | 32.9 | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0  | 0.3   | 0.0   |
| Total Delay             | 403.8                                                                              | 119.4 | 12.1  | 80.8 | 77.3  |     | 313.6 | 125.0 | 0.1   | 65.4 | 68.8  | 41.7  |
| LOS                     | F                                                                                  | F     | B     | F    | E     |     | F     | F     | A     | E    | E     | D     |
| Approach Delay          |                                                                                    | 270.3 |       |      | 78.5  |     |       | 163.8 |       |      | 60.3  |       |
| Approach LOS            |                                                                                    | F     |       |      | E     |     |       | F     |       |      | E     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 52 (33%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.80

Intersection Signal Delay: 154.3

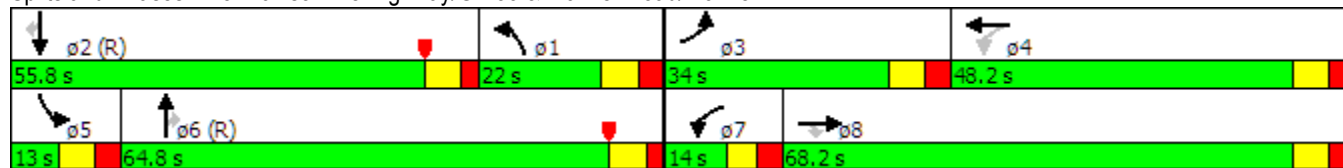
Intersection LOS: F

Intersection Capacity Utilization 112.3%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 8: Dawsonville Highway/GA 53 & McEver Road/McEver



## Lanier Tract DRI

## 9: Dawsonville Highway &amp; Greenhill Circle/Greenhill Circle

phase two p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 146                                                                               | 10                                                                                | 152                                                                               | 66                                                                                | 22                                                                                | 42                                                                                | 274                                                                                 | 2059                                                                                | 77                                                                                  | 44                                                                                  | 1650                                                                                | 59                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | 3%                                                                                |                                                                                   |                                                                                   | 7%                                                                                |                                                                                   |                                                                                     | 1%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Storage Length (ft)        | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 190                                                                                 |                                                                                     | 190                                                                                 | 185                                                                                 |                                                                                     | 100                                                                                 |
| Storage Lanes              | 0                                                                                 |                                                                                   | 1                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              |                                                                                   | 0.955                                                                             |                                                                                   |                                                                                   | 0.964                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1787                                                                              | 1591                                                                              | 0                                                                                 | 1767                                                                              | 1558                                                                              | 1796                                                                                | 3592                                                                                | 1607                                                                                | 1805                                                                                | 3610                                                                                | 1615                                                                                |
| Flt Permitted              |                                                                                   | 0.591                                                                             |                                                                                   |                                                                                   | 0.482                                                                             |                                                                                   | 0.042                                                                               |                                                                                     |                                                                                     | 0.044                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1106                                                                              | 1591                                                                              | 0                                                                                 | 884                                                                               | 1558                                                                              | 79                                                                                  | 3592                                                                                | 1607                                                                                | 84                                                                                  | 3610                                                                                | 1615                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 167                                                                               |                                                                                   |                                                                                   | 95                                                                                |                                                                                     |                                                                                     | 54                                                                                  |                                                                                     |                                                                                     | 95                                                                                  |
| Link Speed (mph)           |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 288                                                                               |                                                                                   |                                                                                   | 254                                                                               |                                                                                   |                                                                                     | 778                                                                                 |                                                                                     |                                                                                     | 921                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 7.9                                                                               |                                                                                   |                                                                                   | 6.9                                                                               |                                                                                   |                                                                                     | 11.8                                                                                |                                                                                     |                                                                                     | 14.0                                                                                |                                                                                     |
| Peak Hour Factor           | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.78                                                                              | 0.78                                                                              | 0.78                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 160                                                                               | 11                                                                                | 167                                                                               | 85                                                                                | 28                                                                                | 54                                                                                | 282                                                                                 | 2123                                                                                | 79                                                                                  | 46                                                                                  | 1737                                                                                | 62                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 171                                                                               | 167                                                                               | 0                                                                                 | 113                                                                               | 54                                                                                | 282                                                                                 | 2123                                                                                | 79                                                                                  | 46                                                                                  | 1737                                                                                | 62                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 24                                                                                  |                                                                                     |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.02                                                                              | 1.02                                                                              | 1.02                                                                              | 1.05                                                                              | 1.05                                                                              | 1.05                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          | Left                                                                              |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  | Perm                                                                                |
| Protected Phases           |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     |
| Permitted Phases           | 8                                                                                 |                                                                                   | 8                                                                                 | 4                                                                                 |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 8                                                                                 | 8                                                                                 | 8                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 23.0                                                                              | 23.0                                                                              | 23.0                                                                              | 39.9                                                                              | 39.9                                                                              | 39.9                                                                              | 11.0                                                                                | 28.0                                                                                | 28.0                                                                                | 10.0                                                                                | 36.0                                                                                | 36.0                                                                                |

# Lanier Tract DRI

## 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle

phase two p.m.

|                         |  |       |       |       |       |       |       |       |       |      |       |       |
|-------------------------|------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|
| Lane Group              | EBL                                                                                | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL  | SBT   | SBR   |
| Total Split (s)         | 39.9                                                                               | 39.9  | 39.9  | 39.9  | 39.9  | 39.9  | 31.0  | 110.1 | 110.1 | 10.0 | 89.1  | 89.1  |
| Total Split (%)         | 24.9%                                                                              | 24.9% | 24.9% | 24.9% | 24.9% | 24.9% | 19.4% | 68.8% | 68.8% | 6.3% | 55.7% | 55.7% |
| Maximum Green (s)       | 34.0                                                                               | 34.0  | 34.0  | 34.0  | 34.0  | 34.0  | 25.0  | 104.1 | 104.1 | 5.0  | 83.1  | 83.1  |
| Yellow Time (s)         | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 4.4   | 4.4   | 3.5  | 4.4   | 4.4   |
| All-Red Time (s)        | 2.9                                                                                | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 3.0   | 1.6   | 1.6   | 1.5  | 1.6   | 1.6   |
| Lost Time Adjust (s)    |                                                                                    | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |
| Total Lost Time (s)     |                                                                                    | 5.9   | 5.9   |       | 5.9   | 5.9   | 6.0   | 6.0   | 6.0   | 5.0  | 6.0   | 6.0   |
| Lead/Lag                |                                                                                    |       |       |       |       |       | Lead  | Lag   | Lag   | Lead | Lag   | Lag   |
| Lead-Lag Optimize?      |                                                                                    |       |       |       |       |       | Yes   | Yes   | Yes   | Yes  | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   |
| Recall Mode             | None                                                                               | None  | None  | None  | None  | None  | None  | C-Max | C-Max | None | C-Max | C-Max |
| Walk Time (s)           |                                                                                    |       |       | 4.0   | 4.0   | 4.0   |       | 4.0   | 4.0   |      | 4.0   | 4.0   |
| Flash Dont Walk (s)     |                                                                                    |       |       | 30.0  | 30.0  | 30.0  |       | 18.0  | 18.0  |      | 26.0  | 26.0  |
| Pedestrian Calls (#/hr) |                                                                                    |       |       | 0     | 0     | 0     |       | 0     | 0     |      | 0     | 0     |
| Act Effect Green (s)    |                                                                                    | 28.1  | 28.1  |       | 28.1  | 28.1  | 120.0 | 111.5 | 111.5 | 96.9 | 90.3  | 90.3  |
| Actuated g/C Ratio      |                                                                                    | 0.18  | 0.18  |       | 0.18  | 0.18  | 0.75  | 0.70  | 0.70  | 0.61 | 0.56  | 0.56  |
| v/c Ratio               |                                                                                    | 0.88  | 0.40  |       | 0.73  | 0.15  | 0.90  | 0.85  | 0.07  | 0.41 | 0.85  | 0.07  |
| Control Delay           |                                                                                    | 103.0 | 9.8   |       | 87.7  | 1.7   | 58.2  | 30.6  | 5.2   | 23.9 | 58.8  | 11.5  |
| Queue Delay             |                                                                                    | 0.0   | 5.9   |       | 87.6  | 0.0   | 0.0   | 46.9  | 0.0   | 0.0  | 3.2   | 0.0   |
| Total Delay             |                                                                                    | 103.0 | 15.7  |       | 175.3 | 1.7   | 58.2  | 77.5  | 5.2   | 23.9 | 62.0  | 11.5  |
| LOS                     |                                                                                    | F     | B     |       | F     | A     | E     | E     | A     | C    | E     | B     |
| Approach Delay          |                                                                                    | 59.8  |       |       | 119.2 |       |       | 73.0  |       |      | 59.3  |       |
| Approach LOS            |                                                                                    | E     |       |       | F     |       |       | E     |       |      | E     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 68.5

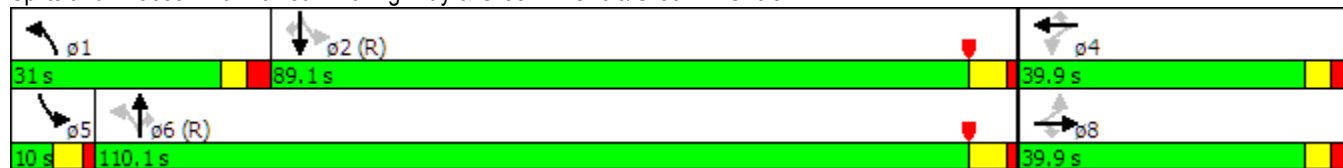
Intersection LOS: E

Intersection Capacity Utilization 91.0%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 9: Dawsonville Highway & Greenhill Circle/Greenhill Circle





## Lanier Tract DRI

## 10: Dawsonville Highway &amp; Shallowford Rd/Best Buy

phase two p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |  |                                                                                   |  |  |  |  |  |  |  |  |
| Volume (vph)               | 596                                                                               | 42                                                                                | 29                                                                                | 40                                                                                | 30                                                                                | 8                                                                                 | 44                                                                                  | 1914                                                                                | 126                                                                                 | 8                                                                                   | 1375                                                                                | 531                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Grade (%)                  |                                                                                   | -1%                                                                               |                                                                                   |                                                                                   | 10%                                                                               |                                                                                   |                                                                                     | -4%                                                                                 |                                                                                     |                                                                                     | -1%                                                                                 |                                                                                     |
| Storage Length (ft)        | 350                                                                               |                                                                                   | 350                                                                               | 0                                                                                 |                                                                                   | 0                                                                                 | 350                                                                                 |                                                                                     | 150                                                                                 | 265                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 100                                                                               |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             | 0.958                                                                             |                                                                                   |                                                                                   | 0.972                                                                             |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1723                                                                              | 1738                                                                              | 1623                                                                              | 0                                                                                 | 1754                                                                              | 1534                                                                              | 1841                                                                                | 3682                                                                                | 1647                                                                                | 1814                                                                                | 3628                                                                                | 1623                                                                                |
| Flt Permitted              | 0.950                                                                             | 0.958                                                                             |                                                                                   |                                                                                   | 0.972                                                                             |                                                                                   | 0.064                                                                               |                                                                                     |                                                                                     | 0.047                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1723                                                                              | 1738                                                                              | 1623                                                                              | 0                                                                                 | 1754                                                                              | 1534                                                                              | 124                                                                                 | 3682                                                                                | 1647                                                                                | 90                                                                                  | 3628                                                                                | 1623                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 106                                                                               |                                                                                   |                                                                                   | 111                                                                               |                                                                                     |                                                                                     | 65                                                                                  |                                                                                     |                                                                                     | 311                                                                                 |
| Link Speed (mph)           |                                                                                   | 45                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                     | 45                                                                                  |                                                                                     |                                                                                     | 45                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 653                                                                               |                                                                                   |                                                                                   | 178                                                                               |                                                                                   |                                                                                     | 1046                                                                                |                                                                                     |                                                                                     | 778                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 9.9                                                                               |                                                                                   |                                                                                   | 4.9                                                                               |                                                                                   |                                                                                     | 15.8                                                                                |                                                                                     |                                                                                     | 11.8                                                                                |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.88                                                                              | 0.88                                                                              | 0.88                                                                              | 0.94                                                                                | 0.94                                                                                | 0.94                                                                                | 0.91                                                                                | 0.91                                                                                | 0.91                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 662                                                                               | 47                                                                                | 32                                                                                | 45                                                                                | 34                                                                                | 9                                                                                 | 47                                                                                  | 2036                                                                                | 134                                                                                 | 9                                                                                   | 1511                                                                                | 584                                                                                 |
| Shared Lane Traffic (%)    | 47%                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 351                                                                               | 358                                                                               | 32                                                                                | 0                                                                                 | 79                                                                                | 9                                                                                 | 47                                                                                  | 2036                                                                                | 134                                                                                 | 9                                                                                   | 1511                                                                                | 584                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 0.99                                                                              | 0.99                                                                              | 0.99                                                                              | 1.07                                                                              | 1.07                                                                              | 1.07                                                                              | 0.97                                                                                | 0.97                                                                                | 0.97                                                                                | 0.99                                                                                | 0.99                                                                                | 0.99                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 0                                                                                   |
| Detector Template          |                                                                                   |                                                                                   |                                                                                   | Left                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Leading Detector (ft)      | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 336                                                                                 | 0                                                                                   | 0                                                                                   | 336                                                                                 | 0                                                                                   |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 330                                                                                 | 0                                                                                   | 0                                                                                   | 330                                                                                 | 0                                                                                   |
| Detector 1 Size(ft)        | 40                                                                                | 40                                                                                | 0                                                                                 | 20                                                                                | 40                                                                                | 0                                                                                 | 40                                                                                  | 6                                                                                   | 0                                                                                   | 0                                                                                   | 6                                                                                   | 0                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Turn Type                  | Split                                                                             | NA                                                                                | Perm                                                                              | Split                                                                             | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | Perm                                                                                | NA                                                                                  | Perm                                                                                |
| Protected Phases           | 3                                                                                 | 3                                                                                 |                                                                                   | 4                                                                                 | 4                                                                                 |                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 4                                                                                 | 6                                                                                   |                                                                                     | 6                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Detector Phase             | 3                                                                                 | 3                                                                                 | 3                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 1                                                                                   | 6                                                                                   | 6                                                                                   | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)          | 36.7                                                                              | 36.7                                                                              | 36.7                                                                              | 38.9                                                                              | 38.9                                                                              | 38.9                                                                              | 10.8                                                                                | 28.8                                                                                | 28.8                                                                                | 30.8                                                                                | 30.8                                                                                | 30.8                                                                                |

# Lanier Tract DRI

## 10: Dawsonville Highway & Shallowford Rd/Best Buy

phase two p.m.



| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL  | NBT   | NBR   | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|
| Total Split (s)         | 37.0  | 37.0  | 37.0  | 38.9  | 38.9  | 38.9  | 10.8 | 84.1  | 84.1  | 73.3  | 73.3  | 73.3  |
| Total Split (%)         | 23.1% | 23.1% | 23.1% | 24.3% | 24.3% | 24.3% | 6.8% | 52.6% | 52.6% | 45.8% | 45.8% | 45.8% |
| Maximum Green (s)       | 30.3  | 30.3  | 30.3  | 33.0  | 33.0  | 33.0  | 5.0  | 77.3  | 77.3  | 66.5  | 66.5  | 66.5  |
| Yellow Time (s)         | 4.5   | 4.5   | 4.5   | 3.0   | 3.0   | 3.0   | 3.0  | 4.9   | 4.9   | 4.9   | 4.9   | 4.9   |
| All-Red Time (s)        | 2.2   | 2.2   | 2.2   | 2.9   | 2.9   | 2.9   | 2.8  | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   |
| Lost Time Adjust (s)    | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.7   | 6.7   | 6.7   |       | 5.9   | 5.9   | 5.8  | 6.8   | 6.8   | 6.8   | 6.8   | 6.8   |
| Lead/Lag                | Lead  | Lead  | Lead  | Lag   | Lag   | Lag   | Lead |       |       | Lag   | Lag   | Lag   |
| Lead-Lag Optimize?      | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes  |       |       | Yes   | Yes   | Yes   |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0  | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None  | None  | None  | None  | None  | None  | None | C-Min | C-Min | C-Min | C-Min | C-Min |
| Walk Time (s)           | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |
| Flash Dont Walk (s)     | 26.0  | 26.0  | 26.0  | 29.0  | 29.0  | 29.0  |      | 18.0  | 18.0  | 20.0  | 20.0  | 20.0  |
| Pedestrian Calls (#/hr) | 0     | 0     | 0     | 0     | 0     | 0     |      | 0     | 0     | 0     | 0     | 0     |
| Act Effect Green (s)    | 30.3  | 30.3  | 30.3  |       | 12.6  | 12.6  | 98.7 | 97.7  | 97.7  | 87.1  | 87.1  | 87.1  |
| Actuated g/C Ratio      | 0.19  | 0.19  | 0.19  |       | 0.08  | 0.08  | 0.62 | 0.61  | 0.61  | 0.54  | 0.54  | 0.54  |
| v/c Ratio               | 1.08  | 1.09  | 0.08  |       | 0.57  | 0.04  | 0.31 | 0.91  | 0.13  | 0.19  | 0.77  | 0.57  |
| Control Delay           | 130.7 | 133.6 | 0.4   |       | 86.5  | 0.4   | 18.2 | 34.6  | 7.5   | 55.5  | 56.2  | 34.0  |
| Queue Delay             | 1.2   | 1.2   | 0.0   |       | 0.0   | 0.0   | 0.0  | 46.4  | 0.0   | 0.0   | 36.0  | 0.8   |
| Total Delay             | 131.9 | 134.9 | 0.4   |       | 86.5  | 0.4   | 18.2 | 81.0  | 7.5   | 55.5  | 92.2  | 34.9  |
| LOS                     | F     | F     | A     |       | F     | A     | B    | F     | A     | E     | F     | C     |
| Approach Delay          |       | 127.7 |       |       | 77.7  |       |      | 75.2  |       |       | 76.1  |       |
| Approach LOS            |       | F     |       |       | E     |       |      | E     |       |       | E     |       |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 91 (57%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.09

Intersection Signal Delay: 83.2

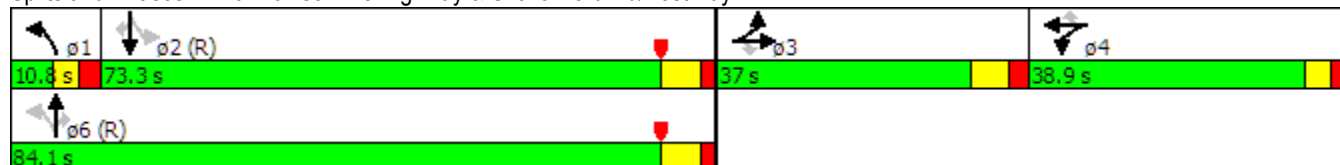
Intersection LOS: F

Intersection Capacity Utilization 90.9%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 10: Dawsonville Highway & Shallowford Rd/Best Buy





Harbour Point Community Association  
3313 Harbour Point Parkway  
Gainesville, Georgia 30506  
April 25, 2017

Subject: Oak Hall Development

Mayor Danny Dunagan  
300 Henry Ward Way  
Suite 303  
P.O. Box 2496  
Gainesville, Georgia 30501

Dear Mayor Dunagan:

My name is Gary Lawrence and I currently serve as the President of the Harbour Point Community Association Board. Harbour Point is a Community of 290 households located on Route 53, about 5.5 miles west of the proposed Oak Hall Development on Ahaluna Drive. Our Board recently received a presentation on this Development and has the following concerns.

1 Our residents are currently experiencing significant delays in exiting our Community onto Route 53. These delays occur not only during rush hours but throughout the day, 7 days a week. GDOT has reported a growth of more than 2000 vehicles a day that pass our entrance from 2015 to 2016, due to the widening project and the many new businesses located in the corridor. This traffic is projected to grow regardless of any new development. Many of our residents are avoiding the traffic congestion enroute to Gainesville, by turning west and doing their shopping in Dawsonville.

2 The traffic in this already congested corridor will be exacerbated by the Oak Hall Development. The GPAB had cancelled a March 7 Public Hearing due the lack of current traffic data to assess the impact of traffic from this Development. A traffic study by Arcadis Consulting was commissioned to gather the needed data. The result of the study is currently planned for mid to late May. In their haste to obtain project approval, the GPAB has now scheduled the hearing for May 9, which will not allow adequate time for the appropriate review of the study's findings and the development of traffic remediation efforts needed to approve the development.

3        There appears to be no plan to reprioritize traffic enhancement Tier 2 projects to Tier 1 status to address the immediate need for something to be done in time for the Oak Hall Development. We perceive that the current plan is to approve the project and then to worry about the resultant traffic congestion later. We contend that the City and County should at least have a plan for traffic remediation and controlling signal light sequences, but that will not be enough. We need additional lane capacity and turning lanes, etc. before the project comes on line.

4        Harbour Point certainly understands the value of new development and the need for additional affordable housing for our beautiful City of Gainesville. To approve the project without having a clear understanding of potential traffic problems and a short term plan to address these issues is dangerous for the overall image and livability of Gainesville. We recommend that the Developer, GDOT and all of the other parties develop a traffic remediation plan and locate the monies to make it happen before the project is approved.

As Mayor of our great City, I ask that you have the steps required for the approval of this Development sequenced appropriately, so that we are in front of the problem with new roadway capacity and not scrambling after the congestion is upon us. Thank you for your attention to this important issue.

Sincerely,

Gary Lawrence

cc:    Bryan Lackey, City Manager  
      City Council  
      GPAB Members

J. Ethan Underwood  
[eunderwood@mhtlegal.com](mailto:eunderwood@mhtlegal.com)

REVISED 2017-01-27

#### RESERVATION OF CONSTITUTIONAL AND LEGAL RIGHTS

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Applicant:</b>        | <b>Oak Hall Companies, LLC</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Subject Property:</b> | <b>157.98 Acres Designated as Hall County Tax Parcel(s): See Attached</b>                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Current Zoning:</b>   | <b>PUD, R-I-A, R-B, &amp; R-I</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Proposed Zoning:</b>  | <b>PUD &amp; G-B</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Proposed Use:</b>     | <b>Mixed-Use development, consisting of:</b> <ul style="list-style-type: none"><li>▪ <b>820 age-restricted, independent living, assisted living, and memory care residences</b></li><li>▪ <b>Approximately 24,000 sf of restaurant, retail, office</b></li><li>▪ <b>Approximately 40,000 sf of storage</b></li><li>▪ <b>Approximately 10,650 sf public/semi-public use (Fire Station)</b></li><li>▪ <b>7 commercial outparcels with approximately 8,000 sf average per parcel of Office/Retail/Restaurant</b></li></ul> |
| <b>ROW Access:</b>       | <b>Dawsonville Hwy (SR53)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

This Reservation of Constitutional and Other Legal Rights ("the Reservation") is intended to supplement and form a part of the rezoning application (including any request for zoning, conditional use permit and variances)(the "Application") of the Applicant and the owners of the Subject Property and to put the City of Gainesville on notice of the Applicant's assertion of its constitutional and legal rights.

The Applicant has filed a timely application, has provided all required information and has submitted the appropriate application fees. The application meets all judicial and statutory requirements for approval.

The Current Zoning of the Subject Property is unconstitutional in that it affords no reasonable use of the Subject Property and no resulting benefit to the public from designation under this zoning classification. The Applicant and the owners of the Subject Property have filed the Application to remedy this unconstitutionality.

A refusal by the City of Gainesville to approve the Application, as requested by the Applicant, will impose a disproportionate hardship on the Applicant and owners of the Subject Property without benefiting any surrounding property owners. There is no reasonable use of the Subject Property under any other zoning classification and no resulting benefit to the public from designation to any other classification.

Any provisions in the City of Gainesville Unified Land Development Code (the "ULDC") that classify, or may classify, the Subject Property into any non-requested zoning classification or zoning classification that does not permit the Proposed Use as a matter of right, or at a density less than as requested by the Applicant, are, or will be, unconstitutional in that they will constitute a taking of the Applicant's and owners' property rights without first paying fair, adequate, and just compensation for such rights in violation of Article I, Section III, Paragraph I of the

Georgia Constitution of 1983, as amended, and the Fifth and Fourteenth Amendments to the Constitution of the United States.

The Subject Property is suitable for development under the Proposed Zoning district requested by the Applicant and it is not suitable for development under any other zoning classification, including without limitation the Current Zoning category of the Subject Property, or at a density or use less than that requested by the Applicant. A denial of the Application, as requested by the Applicant, will constitute an arbitrary and capricious act by the City of Gainesville without any basis for such, and will constitute an abuse of discretion in violation of Article I, Section I, Paragraph I of the Georgia Constitution of 1983, as amended and the Due Process Clause of the Fifth and Fourteenth Amendments to the Constitution of the United States.

A refusal by the City of Gainesville to approve the Application, as requested by the Applicant, will prohibit the only viable economic use of the Subject Property, will be unconstitutional and will discriminate in an arbitrary, capricious and unreasonable manner between the Applicant and owner and the owners of similarly situated properties in violation of Article I, Section I, Paragraph II of the Georgia Constitution of 1983, as amended and the Equal Protection Clause of the Fourteenth Amendment to the Constitution of the United States.

The City of Gainesville cannot lawfully impose more restrictive standards on the Subject Property's development than are presently set forth in the ULDC. To do so will constitute a taking of the Subject Property as set forth above, and also amount to an unlawful delegation of the Board's authority in response to neighborhood opposition, in violation of Article IX, Section II, Paragraph IV of the Georgia Constitution of 1983, as amended. Any zoning conditions or other restrictions imposed on the Subject Property without the consent of the Applicant and property owners that do not serve to ameliorate the negative impacts of the development are invalid and void. As such, the Applicant and owners reserve the right to challenge any such zoning conditions and other restrictions. The Applicant and owners also reserve the right to challenge any unlawful exactions, whether they are in the form of illegal impact fees or otherwise.

Furthermore, this Reservation also constitutes an Ante Litem Notice pursuant to O.C.G.A. § 36-11-1, which places the City of Gainesville and all other agents of the City on notice of the Applicant's and owners' intent to seek monetary damages and attorney's fees against the City of Gainesville for any rezoning action, zoning condition, illegal impact fee and any other unlawful restrictions and exactions that are imposed on the Subject Property, the Applicant and the owners.

Finally, the Applicant and owners assert that the ULDC, Future Development Map and Comprehensive Plan were not adopted in compliance with the laws or constitutions of the State of Georgia or of the United States, and a denial of the Applicant's request based upon provisions illegally adopted will deprive the Applicant and owners of due process under the law.

By filing this Reservation, the Applicant reserves all rights and remedies available to it under the United States Constitution, the Georgia Constitution, all applicable federal, state, and local laws and ordinances, and in equity.

The Applicant and owners respectfully request that this Application be approved as requested by the Applicant and in the manner shown on the Application, which is incorporated herein by reference. This Reservation forms an integral part of the Application, and we ask that the City of Gainesville include this Reservation with the Applicant's other application documents. The Applicant and owners reserve the right to amend and supplement this Reservation at any time.

Page 3 of 3  
January 27, 2017

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Sincerely,



Ethan Underwood,  
Attorney for the Applicant

# CITY OF GAINESVILLE

## AGENDA REQUEST

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**Date Submitted:** 4/21/2017

**Presenter:** Matt Tate

**Item of Business:** Request from **Brightstone Transitions** to amend the existing Planned Unit Development (P-U-D) zoning on a 0.50± acre tract located at the east side of Green Street, across from its intersection with Forrest Avenue (a/k/a **446 Green Street, NE**).  
Ward Number: Four  
Tax Parcel Number(s): 01-024-001-005  
Request: Group home and office

**Meeting Date:** 5/9/2017

---

**Purpose of Request:**

The applicant is proposing to amend an existing property zoned Planned Unit Development (P-U-D) for a group home and office. The property was most recently occupied for professional office purposes and contains a historic residential structure and a detached carriage house which are located within the Green Street Historic District. The applicant states the group home will include a maximum of 6 to 8 males between the age of 18 and 24 years of age that are diagnosed with Asperger's Syndrome which is a social disorder. The students will live on the second floor and the first floor and carriage house will be occupied for office space for the support staff as well as trained residential mentors that are with the students at all times. The adjacent uses include the Norton Agency, Protein Products and other professional offices.

**History/Background:**

**Facts & Issues for Consideration:**

**Department Recommendation:**

Planning staff is recommending approval with three conditions.

**Department Director:**

Rusty Ligon

---

**If funding is involved, are funds approved within the current budget?**

N/A

**Amount Requested:**

**Source of Funds:**

**Finance Comments:**

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**Administrative Comments:**

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**ATTACHMENTS:**

| Description                            | Type            |
|----------------------------------------|-----------------|
| <input type="checkbox"/> Staff Report  | Report          |
| <input type="checkbox"/> Location Maps | Backup Material |
| <input type="checkbox"/> Narrative     | Backup Material |
| <input type="checkbox"/> Plat          | Backup Material |
| <input type="checkbox"/> Pictures      | Backup Material |



**GAINESVILLE PLANNING and APPEALS BOARD  
STAFF RECOMMENDATION**

**Applicant** ..... Brightstone Transitions  
**Property Owner** ..... Deborah Mechwart  
**Location** ..... 446 Green Street  
**Request** ..... Amend P-U-D zoning  
**Size** ..... 0.50± acres  
**Ward** ..... Four  
**Proposed Use** ..... Group home and office  
**Planning Division Staff Recommendation** ..... **Approval, with conditions**  
**Date** ..... May 9, 2017

---

▪ **Applicant's Proposal and Background Information**

The applicant is proposing to amend an existing property zoned Planned Unit Development (P-U-D) for a group home and office. Over the last 10 years the property has been occupied by numerous professional offices for communications, architect, engineer, and most recently an administrative office for American Medical/Testing. The property contains a 4,892 square foot, two-story main structure and a 1,100 square foot, two-story detached carriage house which are located within the Green Street Historic District. According to a recent site inspection performed for the proposed use, there are no significant changes expected to the exterior of the building that would require approval from the Historic Preservation Commission.

The applicant states the group home will include a maximum of 6 to 8 males between the age of 18 and 24 years of age that are diagnosed with Asperger's Syndrome which is a social disorder. The students will live on the second floor and the first floor and carriage house will be occupied for office space for the support staff as well as trained residential mentors that are with the students at all times. Primary access is from an existing driveway along Green Street. Transportation will be provided by staff vehicles and the Gainesville Connection bus.

▪ **Adjacent Land Use and Zoning**

| Location | Use                     | Zoning                                 |
|----------|-------------------------|----------------------------------------|
| North    | Protein Products Office | Residential and Office (R-O) -City     |
| South    | Norton Agency           | Residential and Office (R-O) -City     |
| East     | Professional Office     | Planned Unit Development (P-U-D) -City |
| West     | Professional Office     | Residential and Office (R-O) -City     |

▪ **Zoning History**

*The following zoning actions have taken place in the immediate area during the last ten years:*

**2017** – A request by W.L. Norton Agency Inc., to rezone a 0.42<sup>±</sup> acre tract located at 418 Boulevard NE from Residential-II (R-II) to Residential and Office (R-O) was approved by the Planning and Appeals Board and is pending a final vote by City Council.

**2015** – A request by Hands on Healing, Inc. for a Special Use for a therapeutic massage and exercise therapy office located at 431 Green Street within Residential and Office (R-O) zoning was approved with one condition.

**2014** – A request by Gerald Darby and Bobby Norris for a Special Use for an antique gallery and residence located at 756 Green Street within Residential and Office (R-O) zoning was approved with one condition.

**2012** – A request by The Norton Agency Insurance, LLP to rezone a 0.61<sup>±</sup> acre tract located at 424 Boulevard NE from Residential-II (R-II) to Residential and Office (R-O) was approved with conditions for a professional office.

**2012** – A request by Dennis & Jill Momper to rezone a 0.51<sup>±</sup> acre tract located at 430 Prior Street NE from Residential-II (R-II) to Residential and Office (R-O) was approved with conditions for a professional office.

**2010** – A request by Autumn Leaves Assisted Living Corporation located at 756 Green Street for a Special Use on a 0.61<sup>±</sup> acre tract within a Residential and Office (R-O) zoning district for an assisted living facility was conditionally approved.

**2010** – A request by Harold A. Hinchman to rezone a 1.89<sup>±</sup> acres tract located at 1050 Park Street NE from Residential-I (R-I) to Residential-II (R-II) with a special use was denied for a group home for men.

**2008** – A request by Brenau University located at 326 and 352 Boulevard NE for a Special Use on a 1.44<sup>±</sup> acres tract within Office and Institutional (O-I) zoning district for dormitories was approved with conditions.

**2007** – A request by Parkberry Development, LLC to rezone a 2.49<sup>±</sup> acres tract located at 535, 543 and 557 Mulberry Lane; and 819 and 825 Park Street from Residential-I (R-I) to Planned Unit Development (P-U-D) was denied for residential townhomes.

▪ **Staff Analysis**

**(1) Is the proposed use suitable in view of the zoning and development of adjacent and nearby property?**

The subject property is located within an area that contains a mixture of residential and non-residential land uses and zoning districts which appears to be supportive of the proposed use. Nearby single-family and multi-family residential uses are located along secondary streets off of Green Street. Other nearby uses includes numerous professional offices, medical offices, US Post Office, Mellow Mushroom restaurant and Hall County Board of Education offices.

**(2) Will the proposed use adversely affect the existing use or usability of adjacent or nearby property?**

The proposed use should have minimal affects to the surrounding and nearby properties as the property and exterior of the building will remain mostly unchanged. As well, the adjacent and nearby uses include a mixture of residential and non-residential uses which appear to support the proposal. The proposed group home will house 6 to 8 young adult men diagnosed with Autism Spectrum Disorder Level 1 known as Asperger's Syndrome. Traffic generated from the facility should be minimal as the young adults will use staff vehicles and the Gainesville Connection for transportation.

**(3) Is the proposed use compatible with the purpose and intent of the Comprehensive Plan?**

It is staff's opinion that the proposed use is consistent with the Comprehensive Plan. The Future Development Map for the City of Gainesville places the subject property within the *Mixed-Use General* land use category which includes areas containing or planned for a mixture of land uses including office, neighborhood retail, and residential. The types of non-residential uses that are desirable in this area would include restaurants, specialty retail, and low-intensity office.

According to the Character Area map for the City of Gainesville, the subject property is located within the *Central Core* Character Area specifically within the *Downtown/Midtown* subarea. The vision for this area includes additional office and housing to provide a more sustainable mix of uses. Historic preservation and sensitive infill are key to maintaining the strong sense of place. There should be a focus on preservation of existing character through an adaptive reuse where feasible. Land uses supported in this area include mixed-use, multi-family residential, commercial, public / institutional, and transportation / communications / utilities.

**(4) Are there substantial reasons why the property cannot or should not be used as currently zoned?**

The subject property is zoned Planned Unit Development (P-U-D) and is limited to professional office uses. The proposed change in use requires the current zoning to be amended. The proposed group home and office use should have minimal impacts on the adjacent and nearby historic properties based on its scale and how it will function compared to other group homes.

**(5) Will the proposed use cause an excessive or burdensome use of public facilities or services, including but not limited to streets, schools, water or sewer utilities, and police or fire protection?**

Various City services including police and fire protection and water utilities serve the adjacent properties. Existing water and sewer services are capable of serving the proposal. Gainesville Fire Station #2 is located off of Holly Drive and is approximately 0.5± miles from the subject property.

The proposal would have minimal to no impact on the school system given the age of the occupants.

Impacts to the existing road network and parking are capable of handling the minimal amount of traffic entering and exiting the property. The Georgia Department of Transportation will be required to review and approve any plan changes to Green Street.

**(6) Is the proposed use supported by new or changing conditions not anticipated by the Comprehensive Plan or reflected in the existing zoning on the property or surrounding properties?**

Most of the properties fronting Green Street have been rezoned to Residential and Office (R-O) and converted from residential to professional offices over the past 40 years. The proposal is consistent with the Comprehensive Plan which expects the use of the property to include a mixture of uses.

**(7) Does the proposed use reflect a reasonable balance between the promotion of the public health, safety, morality, or general welfare and the right to unrestricted use of property?**

Due to the Comprehensive Land Use Plan and the mixture of surrounding uses, the proposed zoning amendment request appears to reflect a reasonable balance between the promotion of the public health, safety, morality, or general welfare and the right to unrestricted use of property.

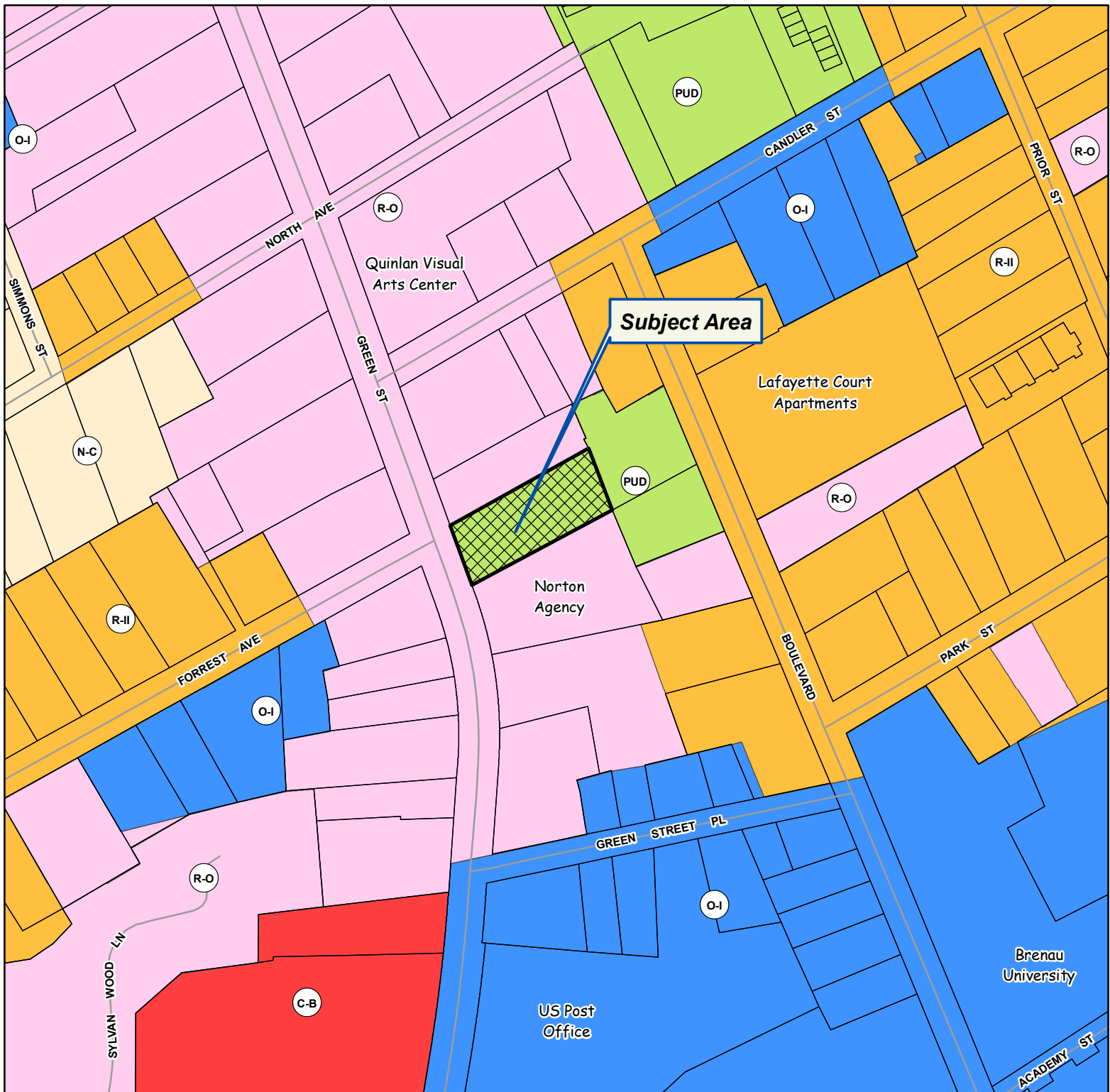
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▪ **Staff Recommendation**

The Planning Division staff is recommending **conditional approval** of this zoning amendment request based on the Comprehensive Plan and the adjacent mixture of uses.

**Conditions**

1. The development standards within the narrative, site plan and photographs submitted with the applicant's zoning amendment application shall be made part of the zoning ordinance, and shall be subject to the Community Development Director approval.
2. The approved use for the subject property shall be limited to professional office uses and the proposed group home as described within the applicant's narrative not to exceed 8 adult males. A different group / transitional home use shall not be permitted.
3. The existing monument sign shall not be replaced or structurally modified except for the sign face area depicting the name of the business.



Applicant:

**BRIGHTSTONE TRANSITIONS**

**ZONING AMENDMENT REQUEST**



**Request:**  
Amend an existing 0.50+/- acre tract zoned P-U-D for a group home and office

**Subject Area Address:**  
446 Green Street, NE

Meeting: 5/9/2017  
Prepared: 4/20/2017

**Gainesville Community Development Department**

 Subject Area

0 120 240 360 480 Feet

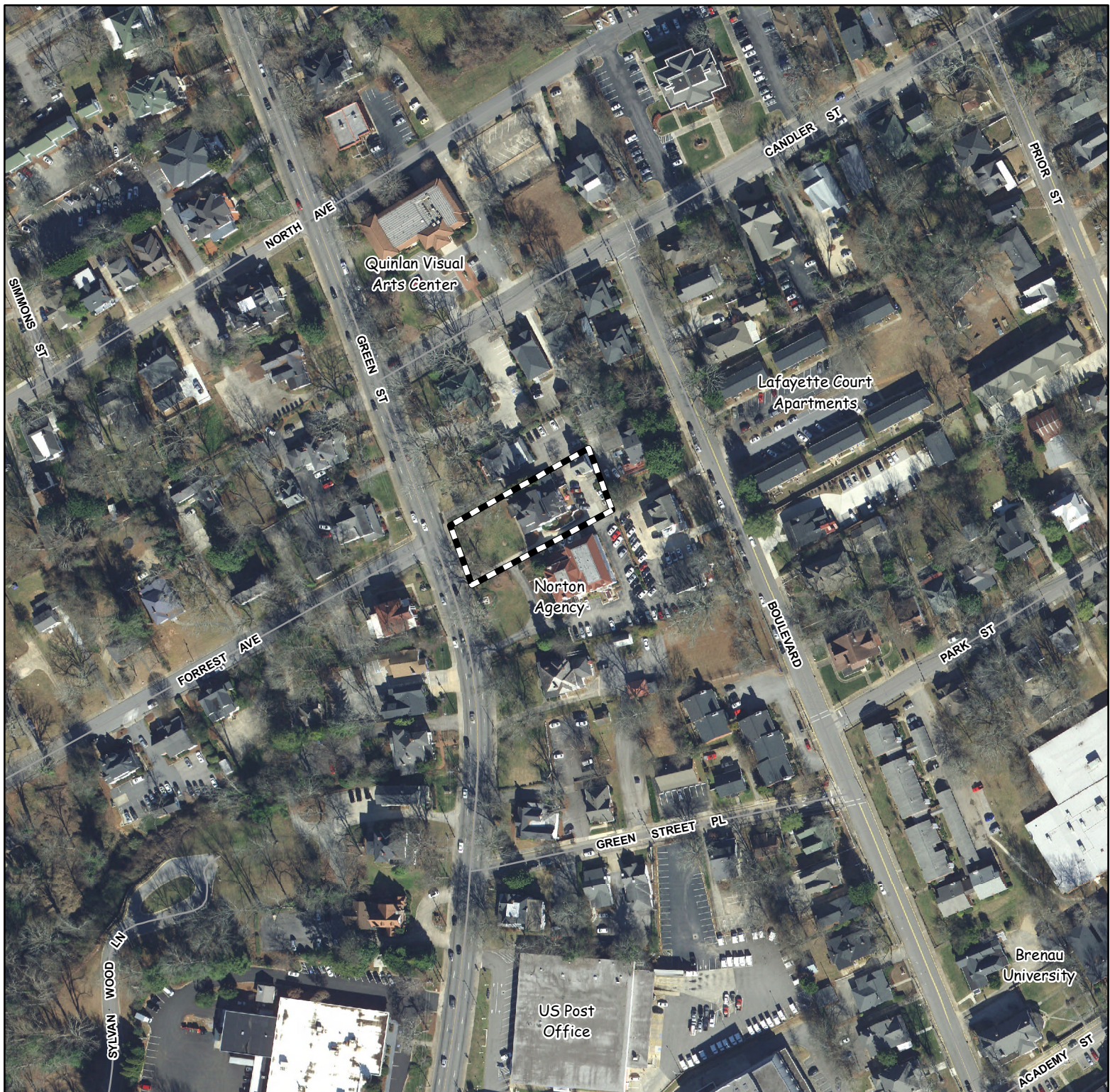


1" = 200'

**Tax Parcel:** 01-024-001-005

Page 784 of 1120





Applicant:

**BRIGHTSTONE TRANSITIONS**

**ZONING AMENDMENT REQUEST**



**Request:**

Amend an existing 0.50+/- acre tract zoned P-U-D for a group home and office

**Subject Area Address:**

446 Green Street, NE

Meeting: 5/9/2017

Prepared: 4/20/2017

**Gainesville Community Development Department**



Subject Property

Aerial from 2015

0 120 240 360 480 Feet



1" = 200'

**Tax Parcel: 01-024-001-005**

Page 785 of 1120





To Whom It May Concern,

Brightstone Transitions would like to amend the Planned Unit Development (PUD) for a Group Home designation from the city of Gainesville. Brightstone Transitions is a young adult transition program. We work with young adults to help them become independent as possible. All of our young adults are diagnosed Autism Spectrum Disorder Level 1, what was better known as Asperger's Syndrome. Brightstone is nationally known as a leader and a innovative program within the therapeutic industry. Brightstone is a member of the National Association of Therapeutic Schools and Programs (NATSAP) and of the Young Adult Transition Association (YATA). Our clients are young men, ranging in age from 18-24. Our typical client is the young adult who struggles socially, hasn't been able to achieve success, and wants their independence.

Although we are asking for a group home amendment we are far from a traditional group home. We would use the bottom floor of the house as office space, where are Director of Clinical Services and Program Director would work. In the house, we would only have 6-8 students at a time living on the top floor. We always have two trained residential mentors with the students at all times. We have two vehicles to help with transport and the staff vehicles, our footprint would be minimal. We expect our clients to learn the local bus system for their transportation.

Brightstone Clients are high-functioning, bright, and typically anxious around new situations. They tend to struggle socially or academically, and haven't learned the life skills necessary to be successful. Our clients are capable of

Brightstone Transitions  
PO Box 2971  
Cumming, GA 30506

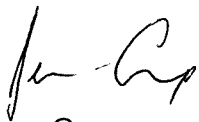
success, but for whatever reason they have been unable to achieve/maintain that success.

The struggles our clients face often are based diagnoses of ASD level 1, which includes social anxiety, we partner with each client's practitioners to help develop a plan that works for that young adult. Many have failed to "launch", and often appear unwilling or unable to achieve the milestones established by their peers.

Brightstone has chosen to try to operate in Gainesville because of the numerous resources that the city has to offer and the support we have gotten from the community. We hope to continue this amazing partnership and help to spotlight our community. We are asking for 446 Green St, Gainesville, GA to be zoned as a group home, but please understand that we are very different from a group home or any drug/alcohol rehab. Our young adults are rule followers and good young men, we are most worried about our clients being taken advantage of from others. Our young adults are not troubled youth or have had trouble with the law. They are smart and anxious young men looking to better their lives.

Please feel free to ask us any questions and we would love for you to meet our clients as well.

Regards,

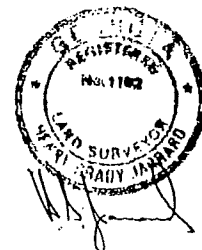
A handwritten signature in black ink, appearing to read 'J. Cox'.

Jason Cox

Brightstone Transitions  
Director of Business Development

Brightstone Transitions  
PO Box 2971  
Cumming, GA 30506





PLAT FOR

CAROLYN H. POSTELL

CITY OF GAINESVILLE  
HALL COUNTY, GEORGIA

SCALE: 1"=30' JUNE/25/1993

REVISED APR/07/1999



Front of House



Back of House



PARKING on side  
of house



ATTACHED BUILDING:  
proposed for office  
space





Front Foyer:

where offices

and sitting area would be





Client bedroom



Client Bedroom

# CITY OF GAINESVILLE

## AGENDA REQUEST

---

**Date Submitted:** 4/21/2017

**Presenter:** Matt Tate

**Item of Business:** Request from **Montecito Development** to rezone a 0.48± acre tract located on the south side of Enota Avenue, west of its intersection with Thompson Bridge Road (a/k/a **149 Enota Avenue, NW**) from Office and Institutional (O-I) to Neighborhood Business (N-B), with a special use.

Ward Number: Two

Tax Parcel Number(s): 01-074-004-001

Request: Convenience store with fuel pumps

**Meeting Date:** 5/9/2017

---

**Purpose of Request:**

The applicant is proposing to rezone the subject property with a special use to construct a 5,200± square foot convenience store with four pump islands. The property contains a parking lot and wooded buffer. According to the applicant's concept plan, the subject property would be combined with the adjacent property fronting Thompson Bridge Road and used for parking area, dumpster pad and buffer area. Access is proposed from Thompson Bridge Road and Enota Avenue. Surrounding uses include a vacant gas station and store, M & R Rentals & Sales, professional office and a single-family home.

**History/Background:**

**Facts & Issues for Consideration:**

**Department Recommendation:**

Planning staff is recommending denial of this request. However, if the Board votes to recommend approval of the request, staff has proposed five conditions of zoning.

**Department Director:**

Rusty Ligon

---

**If funding is involved, are funds approved within the current budget?**

N/A

---

**Amount Requested:**

**Source of Funds:**

**Finance Comments:**

---

**Administrative Comments:**

---

**ATTACHMENTS:**

| Description                                       | Type            |
|---------------------------------------------------|-----------------|
| <input type="checkbox"/> Staff Report             | Report          |
| <input type="checkbox"/> Location Maps            | Backup Material |
| <input type="checkbox"/> Narrative                | Backup Material |
| <input type="checkbox"/> Plat                     | Backup Material |
| <input type="checkbox"/> Site Plan                | Backup Material |
| <input type="checkbox"/> Architectural Renderings | Backup Material |
| <input type="checkbox"/> Traffic Impact Study     | Backup Material |

**GAINESVILLE PLANNING and APPEALS BOARD  
STAFF RECOMMENDATION**

**Applicant** ..... Montecito Development  
**Property Owner** ..... James Paul Mallard  
**Location** ..... 149 Enota Avenue; 1281 Thompson Bridge Road NW  
**Request** ..... (0.48± acres parcel) -Rezone from O-I to N-B with a special use  
**Request** ..... (0.80± acres parcel) -Special use request within N-B zoning  
**Ward** ..... Two  
**Proposed Use** ..... Convenience store with fuel pumps  
**Planning Division Staff Recommendation** ..... **Denial**  
**Date** ..... May 9, 2017

---

▪ **Applicant's Proposal and Background Information**

The applicant's proposal consists of two applications. The first application proposes to rezone a 0.48± parcel from Office and Institutional (O-I) to Neighborhood Business (N-B) with a special use. The second application proposes a special use for a 0.80± acres parcel zoned Neighborhood Business (N-B).

The purpose of the requests is to combine the two properties to construct a 4,200± to 5,200± square foot convenience store with four pump islands. The proposed store is to include a mixture of brick, stone and stucco materials to meet overlay standards. In addition, the proposed fuel canopy will be improved with a pitched roof and the support poles will be faced with stone material to match the building. According to the applicant's concept plan, a two-way access is proposed from Thompson Bridge Road and from Enota Avenue. The existing driveway on Thompson Bridge Road closest to the intersection will be removed. As well, a portion of the existing vegetation to the rear of the property will be removed to provide for parking. A 25-foot wide buffer is proposed adjacent to the neighboring residential property to the south and a 10-foot buffer is proposed adjacent to the office property to the west.

The property is located within the Gateway Corridor Overlay Zone and the front property contains a parking lot which was previously the location of a Long John Silver's restaurant and a bank teller machine. The rear property contains a parking lot and wooded buffer.

**Adjacent Land Use and Zoning**

| Location | Use                                                                                   | Zoning                                                                    |
|----------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| North    | Burger King; M & R Rentals                                                            | Neighborhood Business (N-B) -City<br>Office and Institutional (O-I) -City |
| South    | Closed gas station / retail store, single-family home                                 | Neighborhood Business (N-B) -City<br>Residential-I (R-I) -City            |
| East     | Marco's Pizza, Anderson Physical Therapy Associates, Public Grocery, Wells Fargo Bank | Neighborhood Business (N-B) -City<br>Regional Business (R-B) -City        |
| West     | Professional office                                                                   | Office and Institutional (O-I) -City                                      |

▪ **Traffic Impact Study Summary**

A Traffic Impact Study was completed for the proposed development on February 23, 2017 and later revised on April 19, 2017 by Marc R. Acampora, PE, LLC Traffic Engineering, at the Thompson Bridge / Enota intersection on Thursday, February 16, 2017. The counts at Thompson Bridge / Walmart, Enota / Riverside, and GA 11 Bus / South Enota were collected on Thursday, March 30, 2017, and the counts at GA 60 / GA 11 Bus and GA 60 / Ridgewood were obtained from another recent traffic study performed in the area, collected on Wednesday, February 22, 2017. Traffic counts were collected from 7:00 A.M to 9:00 A.M. and from 4:30 P.M. to 6:30 P.M.

The only available historic Georgia DOT 24-hour traffic counts were also collected in the vicinity from the year 2015. The annual daily traffic volume on Thompson Bridge Road adjacent to the subject site was 26,500 in 2015 and the AADT on Enota adjacent to the site was 1,760 in 2015.

The study revealed that the peak hour generation for this project was calculated at 153 unadjusted trips or 52 new trips and the 24-hour volume is 4,340 unadjusted trips or 1,574 new trips. The study included the following six intersections.

1. Thompson Bridge Road at Walmart / Taco Bell Access
2. Thompson Bridge Road / Enota Avenue
3. Enota Avenue at Riverside Drive
4. GA 11 Business at South Enota Avenue
5. GA 60 at GA 11 Business
6. GA 60 at Ridgewood Avenue

A summary of the study revealed that future operations, upon the project being fully constructed and operational, will operate at acceptable levels at the intersection of Thompson Bridge Road and Enota Avenue as well as both the both proposed site access locations. Additionally, the Traffic Engineer states that gas station and convenience store would generate less traffic during peak hours than a fast food restaurant would.

**Thompson Bridge Road and Enota Avenue**

The analysis of the Thompson Bridge / Enota intersection shows an overall acceptable level of service in both the existing and future conditions. The side street approaches on Enota Avenue operate at LOS E, primarily due to the green time on the signal favoring the Thompson Bridge Road approaches. 1) Shorter cycle lengths would reduce delays and side street queuing. While there are crosswalks and pedestrian signals on all approaches at this signalized intersection, only the northeast corner has an ADA accessible ramp. 2) Consideration should be given to adding ADA ramps on the remaining corners. 3) The crosswalk and stop bar striping is also in poor condition and should be refreshed.

**Thompson Bridge Road at Site Access**

The site plan calls for the elimination of two of the three existing site accesses on Thompson Bridge Road. This will reduce the number of conflict points. It is likely that most vehicles that wish to travel either northbound on Thompson Bridge or to the east on Enota will exit the site at the Enota driveway and capitalize on the protection of the adjacent signal. Because of the difficulty in making this left turn from the site driveway, and the low numbers of vehicles expected to do so, 1) consideration should be given to prohibiting exiting left turns from this driveway. 2) The Georgia DOT access standards were reviewed for this intersection (Thompson Bridge is Georgia State Route 60) and indicate that the access justifies a southbound exclusive right turn lane. The spacing of this driveway from Enota Avenue does not meet the minimum Georgia DOT driveway spacing standards. It is recommended that these



design factors be discussed with Georgia DOT and the City to determine an acceptable solution. 3) The Thompson Bridge Road site access should be constructed with one entering and one exiting lane and the exiting approach should be controlled by stop sign and accompanying stop bar. The project site engineer is referred to the Georgia DOT Driveway Manual for other driveway design standards including driveway width, island design, and curb return radii.

### **Enota Avenue at Site Access**

The site access on Enota is projected to operate with low volumes and very low delays. Most of the site entering trips will enter at the Thompson Bridge access, so that the entering left turns at the Enota driveway are projected at only 6 vehicles in the a.m. peak hour and 5 in the p.m. peak hour. This should minimally impede westbound through flow on Enota. The eastbound right turns entering the site are also minimal, at 5 for the a.m. peak hour and 8 for the p.m. peak hour. This also should minimally impede flows on Enota. 1) The Enota Avenue site access should be constructed with one entering and one exiting lane and the exiting approach should be controlled by stop sign and accompanying stop bar. 2) The existing grade differential between the site and Enota Avenue at the location of the site access should be corrected when the site is developed.

### ▪ **Other Departmental Comments**

According to the Georgia Department of Transportation (GDOT), the development will be required to meet the sight distance requirements and will need to coordinate with GDOT for review and approval.

According to the Gainesville Public Works Department, the developer will need to coordinate with the Gainesville Public Works Department and the Georgia Department of Transportation (GDOT) prior to permitting to address the future traffic improvements at the intersection of Thompson Bridge Road and Enota Avenue.

### ▪ **Zoning History**

*The following zoning actions have taken place in the immediate area during the last ten years:*

**2016** - A request by Jack Bailey to rezone a 0.61<sup>±</sup> acre tract located at 1665 Thompson Bridge Road NW from Residential-I (R-I) to Office and Institutional (O-I) was approved with conditions for an insurance office.

**2016** - A request by Teresa Vickers for a special use for a hair salon within the Office and Institutional (O-I) zoning district located at 977 and 983 Enota Avenue was approved with conditions.

**2015** - A request by David P. Johnson to rezone a 1.458<sup>±</sup> acres tract located at 1537 and 1551 Thompson Bridge Road; and 135 Virginia Circle from Residential-I (R-I) to Neighborhood Business (N-B) with a special use for restaurant with drive-thru and retail was denied.

**2014** – A request by Polestar Development, LLC to rezone a 1.741<sup>±</sup> acres tract located at 1435 Thompson Bridge Road from Residential-II (R-II) to Regional Business (R-B) for a grocery store and fuel service station was approved with conditions.

**2013** - A request by Michael Slate to rezone a 0.67<sup>±</sup> acre tract located at 971 Lanier Avenue NE from Residential-I (R-I) to Residential and Office (R-O) for a professional office was approved with conditions.

**2012** - A request by WAG Properties, Inc. to annex a 0.68<sup>±</sup> acre tract located at 1868 Thompson Bridge Road for a transportation logistics brokerage was approved with General Business (G-B) zoning.

**2011** - A request by Greg Loyd for a special use for a Dunkin Donut restaurant with a drive thru within the Neighborhood Business (N-B) zoning district located at 1151 Thompson Bridge Road was approved with conditions.

**2011** - A request by Jamie Collins to rezone a 1.149<sup>±</sup> acres tract located at 1452, 1464 and 1472 Thompson Bridge Road NE from Residential-I (R-I) and Neighborhood Business (N-B) to General Business (G-B) for a Taco Bell restaurant was approved with conditions.

**2011** - A request by One Eleven, LLC for a special use for the Little Yellow Coffee House with a drive-thru within the Neighborhood Business (N-B) zoning district located at 996 Thompson Bridge Road was approved with conditions.

**2010** - A request by Pam Abernathy for a special use for a single-family residence within the Office and Institutional (O-I) zoning district located at 1745 Thompson Bridge Road was approved with conditions.

**2010** - A request by Yonah Burger for a special use for a restaurant with a drive-thru within the Neighborhood Business (N-B) zoning district located at 1191 and 1195 Thompson Bridge Road was approved with conditions.

**2009** - A request by Lakewood Baptist Church to rezone a 39.53<sup>±</sup> acres tract located at 2235 Thompson Bridge Road from Residential-I (R-I), Residential-II (R-II) and General Business (G-B) to Planned Unit Development (P-U-D) for future expansion of the church was approved with conditions.

**2009** - A request by Danny Dunagan to annex a 0.89<sup>±</sup> acre tract located at 309 Linwood Road for a 46-unit mini-storage facility was approved with General Business (G-B) zoning.

**2009** - A request by Frenil R. Adajania to rezone a 0.20<sup>±</sup> acre tract located at 0 Thompson Bridge Road from Planned Unit Development (P-U-D) to General Business (G-B) for an existing access driveway was approved.

**2009** - A request by Frenil Adajania to annex a 0.48<sup>±</sup> acre tract located at 1878 Thompson Bridge Road for an existing gas station/convenience store was approved with General Business (G-B) zoning.

**2008** - A request by Danny Allen to rezone a 0.77<sup>±</sup> acre tract located at 1770 and 1786 Thompson Bridge Road from Residential-I (R-I) to Residential and Office (R-O) for residential and office uses was approved with conditions.

**2007** - A request by Lee Dempsey to rezone a 1.5<sup>±</sup> acres tract located at 2200 and 2234 Thompson Bridge Road; and 924 and 934 Etta Vista Circle from Residential-I (R-I) and Residential and Office (R-O) to Neighborhood Business (N-B) with a special use for office/commercial mixed-use development was approved with conditions.

**2007** - A request by Mike Weaver to rezone a 0.6<sup>±</sup> acre tract located at 1750 Thompson Bridge Road from Residential-I (R-I) to Residential and Office (R-O) for an attorney's office was approved with conditions. This request was approved after two previous attempts to rezone the subject property were denied.

**2007** - A request by Ken Selzer to rezone 0.814<sup>±</sup> acre from Residential-I (R-I) to Residential and Office (R-O) for residential and office uses at 1143, 1153, and 1167 Green Street Circle

was denied by the Planning and Appeals Board and the request was withdrawn during City Council first reading.

▪ **Staff Analysis**

**(1) Is the proposed use suitable in view of the zoning and development of adjacent and nearby property?**

The adjacent and nearby uses include single-family residential homes, office, service and commercial uses and are zoned Residential-I (R-I), Residential-II (R-II), Office and Institutional (O-I), Neighborhood Business (N-B) and Regional Business (R-B). The applicants proposed development area extends westerly along Enota Drive toward an established residential district. It appears that the proposed zoning of Neighborhood Business (N-B) may be suitable for neighborhood scale retail uses; however, the addition of fuel pumps is more aggressive.

**(2) Will the proposed use adversely affect the existing use or usability of adjacent or nearby property?**

It is staffs opinion that the proposal would have less of an impact to the surrounding area if the development were confined to the front 0.80± acres parcel and limited to the convenience retail store without fuel sales. However, Neighborhood Business (N-B) zoning could be considered for the rear parcel but should not be combined with the front parcel for the purpose of increasing the developable area to add fuel pumps. The addition of fuel pumps will increase turning movements along Thompson Bridge Road and Enota Avenue at a higher rate compared to a professional office or specialty retail store. The properties most impacted by the proposal appear to be the nearby single-family homes as convenience stores typically have longer business hours create more noise from traffic, fuel/delivery trucks and dumpster usage. The applicant does propose a 25-foot vegetated buffer adjacent to the single-family property.

**(3) Is the proposed use compatible with the purpose and intent of the Comprehensive Plan?**

The proposed development is located within the *Retail/Commercial* land use category. The *Retail/Commercial* land use category includes commercial service activities such as grocery stores, banks, restaurants, theatres, hotels, and automotive related businesses. Commercial uses may be located as a single use in one building or grouped together in a shopping center.

According to the Character Area map for the City of Gainesville, the rear 0.48± acre portion of the subject property is located within the *Traditional Neighborhoods* Character Area, specifically within the *Northern Neighborhoods subarea*. The front 0.80± acre portion of the subject property is located within the *City Park Neighborhood Center* Character Area.

The vision for the *Traditional Neighborhood Character Area* anticipates minimal change, and primary issues within this subarea include incompatible infill development and the threat of encroaching urban sprawl. Commercial encroachment should be minimized and should respect and mirror the small scale of the surrounding neighborhoods, while the purity of the landscape and quality of housing should be preserved. The area is not a primary destination for business; however neighborhood serving business development is encouraged. Land uses allowed include low-density and medium-density residential, and mixed-use / commercial.

The vision for the *City Park Neighborhood Center* Character Area states that Thompson Bridge Road should be transformed into a "Complete Street" with sidewalks, landscaping, bike lanes and transit stops. Preservation of local small businesses should be a priority, and key early commercial buildings targeted for preservation. New commercial development should be compatible with the small scale of the older structures, and parking should be located to the rear with inter-parcel connectivity where possible. The area is not anticipated to see major

economic growth, but remain oriented toward addressing existing neighborhood needs. Businesses providing basic goods and services that neighborhood residents depend on in daily life (for example food, household supplies, medicine etc.) should be encouraged. Locally-owned / family-owned businesses should be promoted to encourage small business investment / entrepreneurship. Land uses allowed include mixed-use, commercial and public/Institutional.

**(4) Are there substantial reasons why the property cannot or should not be used as currently zoned?**

The applicant proposes to rezone a 0.48± parcel from Office and Institutional (O-I) to Neighborhood Business (N-B) with a special use. The second application proposes a special use for a 0.80± acres parcel zoned Neighborhood Business (N-B). The N-B zoning district allows for commercial uses such as a convenience store but does not permit fuel pumps without special use approval. Most of the uses permitted within the Neighborhood Business (N-B) zoning district are not auto-oriented in nature. It appears reasonable that both parcels could be combined or developed separately for those uses currently permitted within the Neighborhood Business (N-B) zoning district.

**(5) Will the proposed use cause an excessive or burdensome use of public facilities or services, including but not limited to streets, schools, water or sewer utilities, and police or fire protection?**

City water, sewer and public safety services are currently provided to the property. Gainesville Fire Station #2 is located off of Holly Drive and is approximately 0.8± miles from the subject property.

The proposed use would have no impact on the school system given that it is a non-residential use.

The proposal will increase ingress and egress traffic movements along Thompson Bridge Road which typically experiences high southbound traffic volumes in the morning and high northbound traffic volumes in the evening. The subject property is located at the southeast corner of Thompson Bridge Road and Enota Avenue. According to the Transportation Master Plan for this area, there are planned intersection improvements which will include the addition of a dedicated right turn lane.

**(6) Is the proposed use supported by new or changing conditions not anticipated by the Comprehensive Plan or reflected in the existing zoning on the property or surrounding properties?**

Commercial growth has occurred along this segment of Thompson Bridge Road since the early-mid 1980's consisting of shopping center development, restaurant, retail, bank, personal service establishments and office uses which are consistent with the proposal. It is anticipated that neighborhood scale commercial growth will continue to occur for property fronting Thompson Bridge Road. There are currently four gas stations within a mile of the subject property, not including the closed gas station adjacent to the subject property.

**(7) Does the proposed use reflect a reasonable balance between the promotion of the public health, safety, morality, or general welfare and the right to unrestricted use of property?**

Based on the Comprehensive Plan and the adjacent Neighborhood Business (N-B) zoning, the proposed rezoning portion of the request appears to reflect a reasonable balance between the promotion of the public health, safety, morality, or general welfare and the right to unrestricted use of property. However, the proposed special use to allow for fueling station does not reflect a balance.

---

### **Additional Criteria**

- (1) The type of street providing access to the subject property is adequate to serve the proposed Special Use.**

Thompson Bridge Road (SR 60) is an arterial road and Enota Avenue is a local connector road. Both roads are adequate to serve the proposed use but will require improvements including a dedicated right turn decel lane. The addition of these lanes may require the proposed buildings and parking to shift to account for change.

- (2) Access into and out of the property adequately provides for traffic and pedestrian safety, the anticipated volume of traffic flow, and access by emergency vehicles.**

The subject property is located at the southwest corner of Thompson Bridge Road and Enota Avenue which currently presents somewhat challenging turning movements into the subject property. Pedestrian crosswalks are present but are not ADA compliant. The applicant's concept plan appears to provide for sufficient access for emergency vehicles with some modifications.

- (3) Public facilities such as schools, water or sewer utilities, and police or fire protection are adequate to serve the Special Use.**

Existing public facilities are adequate to serve the proposed use.

- (4) Refuse, service, parking and loading areas on the property are located and screened to protect other properties in the area from such adverse effects as noise, light, glare or odor.**

The proposed concept plan includes a 25-foot wide landscape buffer adjacent to the single-family property and a 10-foot wide landscape buffer adjacent to the existing office use. The proposed dumpster is to be located behind the proposed building adjacent to the residential property.

- (5) The hours and manner of operation of the Special Use have no adverse effects on other properties in the area.**

The applicant states the proposed hours of operation are for the store to remain open 24 hours a day. An alternative schedule could be from 5 a.m. to 12 a.m. which would reduce the impact somewhat on the adjacent and nearby residential homes. These hours of operation would be in direct conflict with the neighboring residential properties.

- (6) The height, size and location of the buildings or other structures proposed on the property are compatible with the height, size or location of buildings or other structures on neighboring properties.**

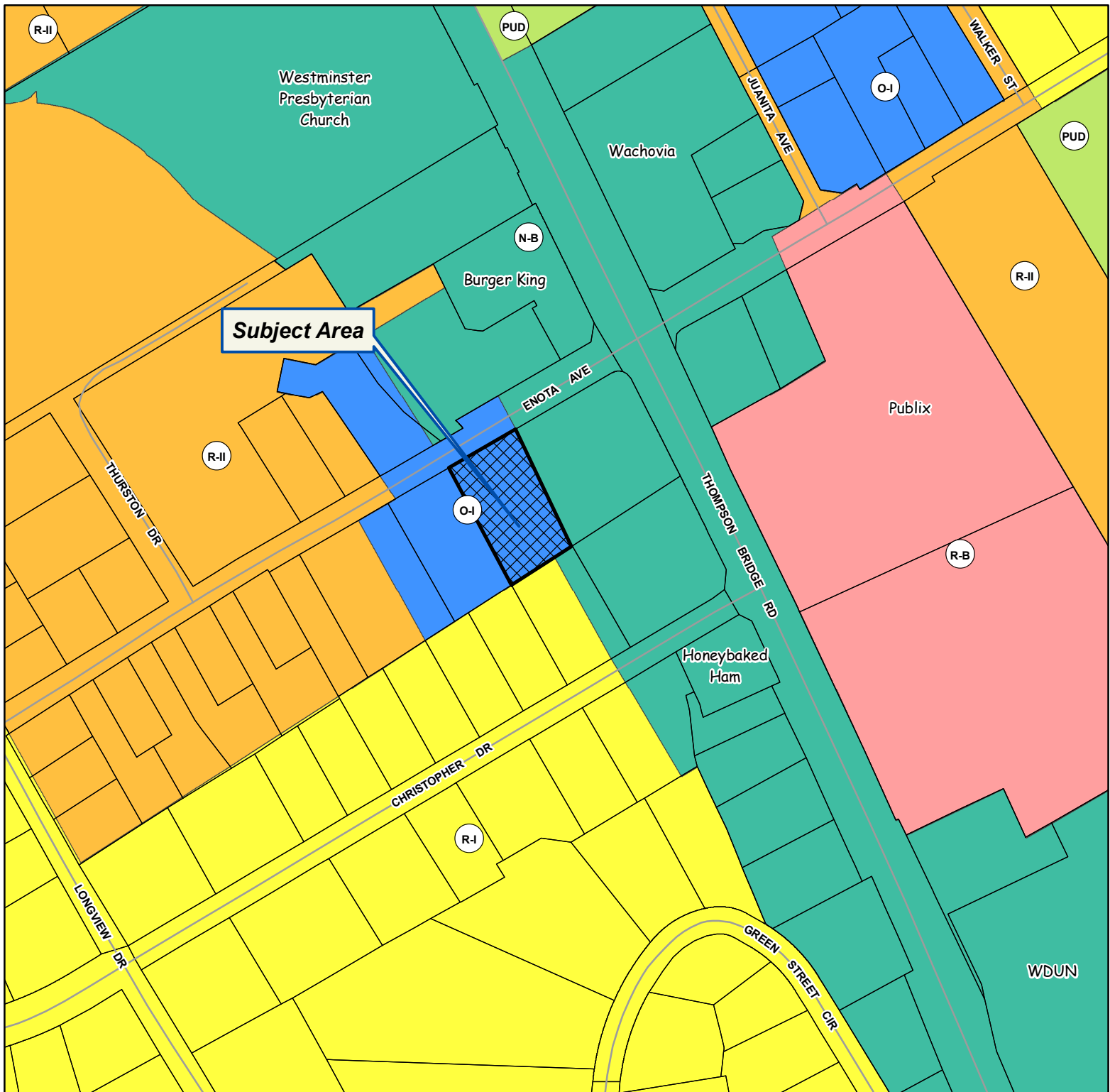
The height, size and location of the proposed structures appear consistent with other commercial structures located along Thompson Bridge Road. The adjacent vacant property to the south currently has a fuel island canopy very close to Thompson Bridge Road at a higher elevation. If approved, there will be two fuel island canopies in close proximity to one another.

▪ **Staff Recommendation**

The Planning Division staff is recommending **denial** of this request based on the Comprehensive Plan and the adjacent residential uses. However, if the Planning and Appeals Board were to recommend approval of this request, staff would recommend the following conditions:

**Conditions**

1. The exterior materials and roof pitch of the building and canopy shall adhere to the standards as depicted on the architectural elevation provided with this rezoning application.
2. The hours of operation for the proposed use shall not exceed 5 a.m. to 12 a.m.
3. All access point design along the portion of Thompson Bridge Road and Enota Avenue in front of the property shall require approval by the Georgia Department of Transportation in conjunction with the Gainesville Public Works Director. All required access / traffic / sidewalk improvements associated with the proposed development shall be at the full expense of the developer / property owner.
4. The applicant / owner shall provide for internal parcel vehicular access with the adjacent vacant property located to the south.
5. An updated as-built boundary survey / plat of the subject property, indicating all improvements required for the proposed use, shall be recorded prior to obtaining a Certificate of Occupancy.



Applicant:

**MONTECITO DEVELOPMENT**

**REZONING REQUEST W/SPECIAL USE**



**Request:**  
Rezone 0.48+/- acre tract from  
Office and Institutional (O-I) to  
Neighborhood Business (N-B) for  
a convenience store with fuel pumps

**Subject Area Address:**  
149 Enota Avenue, NW

Meeting: 5/9/2017  
Prepared: 4/20/2017

**Gainesville Community Development Department**

 Subject Area



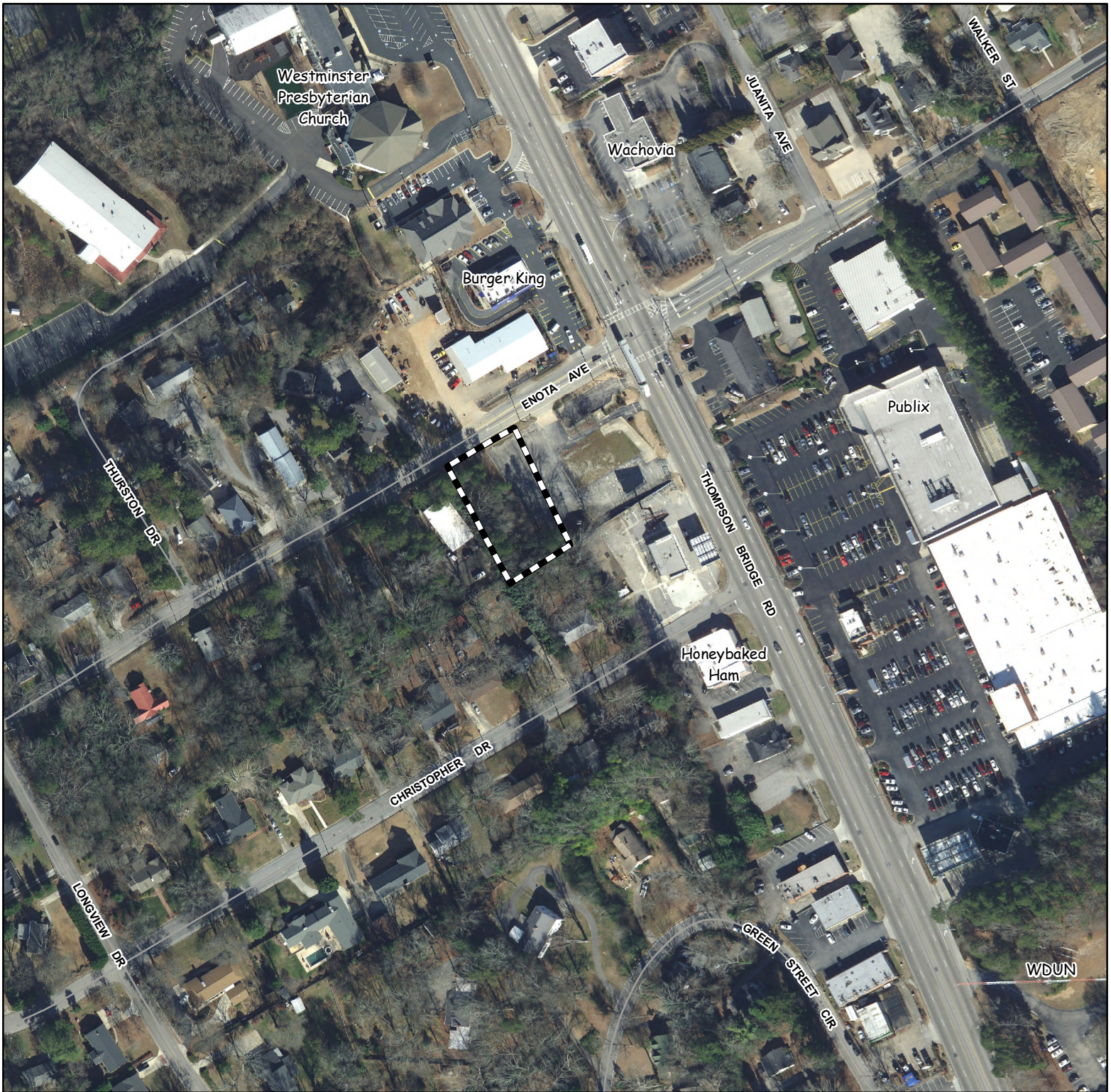
0 120 240 360 480 Feet

1" = 200'

**Tax Parcel:** 01-074-004-001

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Applicant:

**MONTECITO DEVELOPMENT**

**REZONING REQUEST W/SPECIAL USE**



**Request:**  
Rezone 0.48+/- acre tract from  
Office and Institutional (O-I) to  
Neighborhood Business (N-B) for  
a convenience store with fuel pumps

**Subject Area Address:**

149 Enota Avenue, NW

Meeting: 5/9/2017

Prepared: 4/20/2017

**Gainesville Community Development Department**



Subject Property

Aerial from 2015

0 120 240 360 480 Feet



1" = 200'

**Tax Parcel:** 01-074-004-001

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February 24, 2017

## **VIA E-MAIL AND HAND DELIVERY**

City of Gainesville, Georgia  
Attn: Rusty Ligon, Community Development Director  
and Matthew Tate, Planning Manager  
300 Henry Ward Way, Suite 303  
Gainesville, Georgia 30501  
[mtate@gainesville.org](mailto:mtate@gainesville.org)

## **RE: REZONING AND ANNEXATION APPLICATIONS AND LETTER OF INTENT FOR MONTECITO DEVELOPMENTS, LLC**

Dear Mr. Ligon and Mr. Tate:

This Letter of Intent is written on behalf of the property owner and Applicant, Montecito Developments, LLC (the "Applicant"), in support of the submitted zoning applications and any related variances needed or associated with the proposed zoning site plan (collectively, the "Applications") for the subject property located at 1281 Thompson Bridge Rd., NW and 149 Enota Ave., NW, Gainesville, GA 30501, Hall County Tax Parcel Nos. 01074 004020 and 01074 004001 (the "Property"), totaling approximately 1.5 acres.

The Applicant seeks a rezoning from *O&I and N-B to N-B*, to assemble the two long-vacant parcels to allow for a quality convenience store with gas pumps to serve residents and support the City's commercial tax base. This neighborhood, retail use will have no adverse impacts on surrounding properties. Based on market research, there is a need in this area for a quality, neighborhood convenience store. The Applicant is a developer of the well-received Circle K stores, a "2.0" model that provides modern amenities, design and store layouts to support and provide services to their suburban customer base. The Applicant currently plans to comply with all other buffer and setback requirements as reflected in the current zoning conditions. The proposed store will consist of a convenience store building totaling approximately 5,200 square feet, with 4 pump islands. The convenience store will include food, beverage and coffee options for customers.

The property's vacant status and tax value would be greatly increased with the addition of the proposed commercial development. The requested rezoning for the proposed commercial, convenience store and gas pump uses have a demonstrated history of being entirely suitable and complementary to the other land uses in the area, including the more intense commercial and office uses already permitted as a matter of right. This request is consistent with City's previous decisions and precedent in rezoning this and similarly situated properties in this area, with the current uses permitted under the N-B zoning district, and with the future land use plan for this area, being an existing commercial node.

Letter of Intent  
1281 Thompson Bridge Rd.  
and 149 Enota Ave.  
Montecito Developments, LLC

February 24, 2017  
Page 2 of 2

The property has access to a public water supply, public sanitary sewer, and convenient direct access to collector streets, major thoroughfares and state and interstate highways.

### **Constitutional Objections**

The portions of the City of Gainesville Zoning Ordinances which classify or condition the Property into any more or less intensive zoning classification and/or zoning conditions other than as requested by the Applicant and property owner are and would be unconstitutional in that they would take the Applicant's and property owners' property rights without first paying fair, adequate and just compensation for such rights, in violation of Article I, Section I, Paragraph II of the Constitution of the State of Georgia of 1983, the Due Process Clause of the Fourteenth Amendment to the Constitution of the United States.

The Property is presently suitable for development subject only to the approval of the requested rezoning, as requested and amended by the Applicant and property owners, and is not economically suitable for development under its present zoning and development classification, conditions, regulations, and restrictions due to its location, shape, size, surrounding development, and other factors. A denial of the requested applications would constitute an arbitrary and capricious act by the City of Gainesville without any rational basis therefore, constituting an abuse of discretion in violation of Article I, Section I, Paragraphs I and II of the Constitution of the State of Georgia of 1983 and the Due Process Clause of the Fourteenth Amendment to the Constitution of the United States.

A refusal by the City of Gainesville to approve the Applicant's and property owners' requested rezoning, or to apply additional conditions outside of those proposed or agreed to by the Applicant, so as to prohibit reasonable economic use of the Property, would be unconstitutional and discriminate in an arbitrary, capricious and unreasonable manner as to the Applicant and property owners, in violation of Article I, Section I, Paragraph II of the Constitution of the State of Georgia of 1983 and the Equal Protection Clause of the Fourteenth Amendment to the Constitution.

### **Conclusion**

Applicant respectfully requests approval, and submits the Applications and exhibits in further support of their requests. The Applicant and their representatives welcome the opportunity to meet with City officials and staff to answer any questions.

Respectfully submitted,

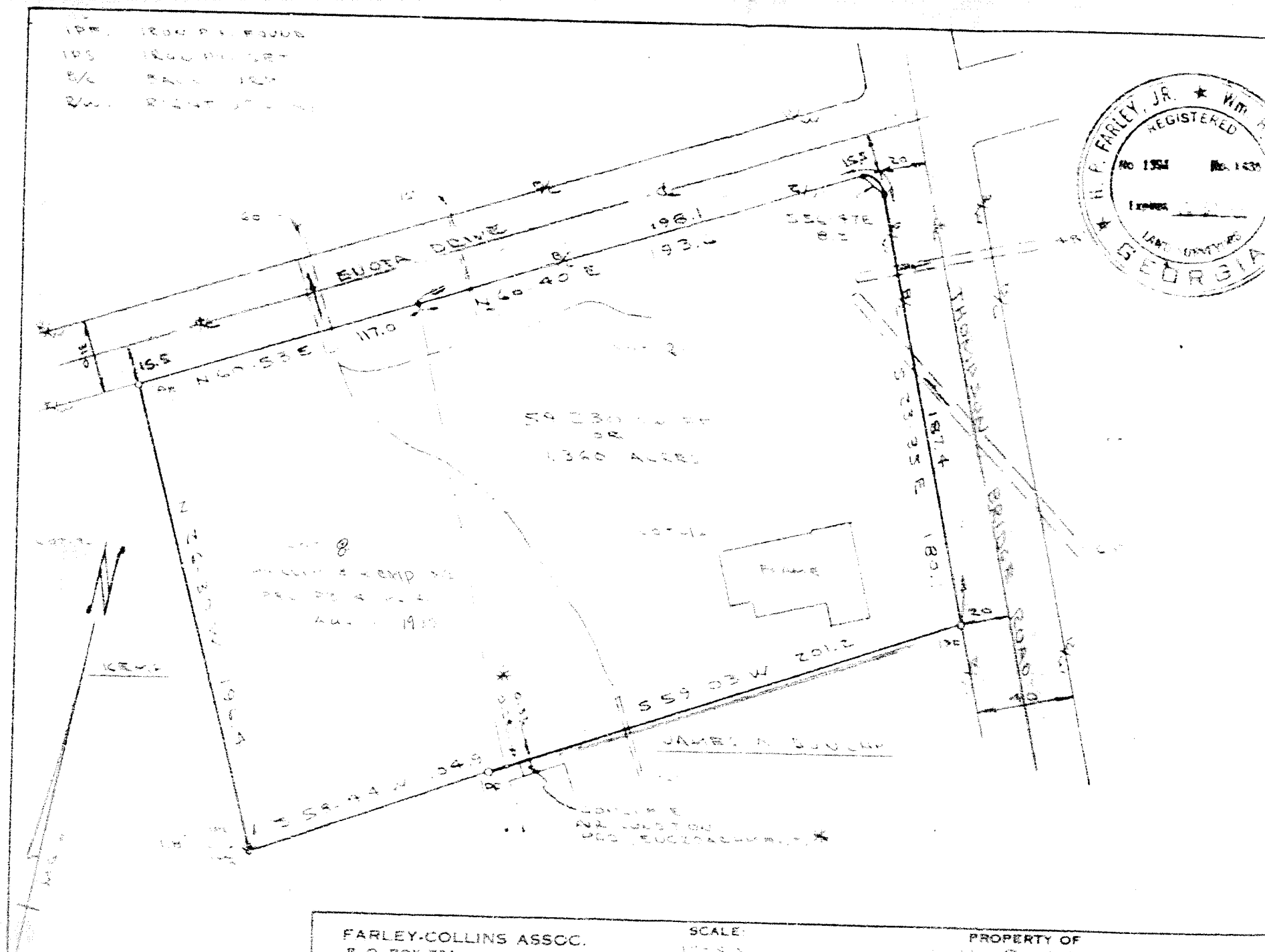
**ANDERSEN, TATE & CARR, P.C.**



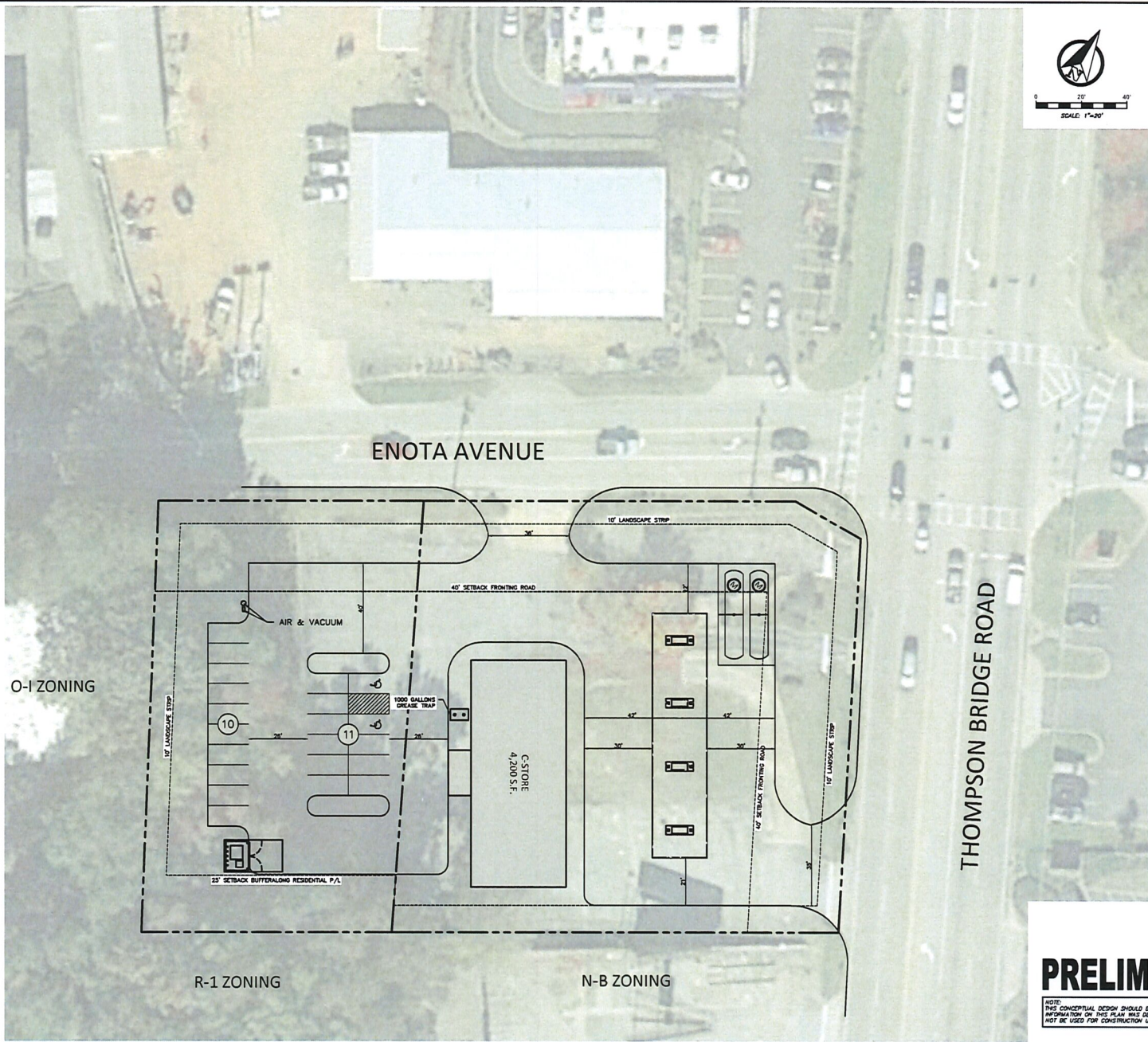
Marian C. Adeimy  
Attorneys for Applicant

Enclosures  
(Rezoning Application Packets)

A circular postmark from W.F. Farley, Jr., Registered, No. 1354, No. 1330, Georgia, dated June 1954. The text "W.F. FARLEY, JR. ★ Wm." is at the top, "REGISTERED" is below it, "No. 1354" and "No. 1330" are on the left and right respectively, "JUN 1954" is in the center, and "GEORGIA" is at the bottom. The words "LATE DELIVERY" are faintly visible at the bottom.







| SITE SUMMARY                                      |                                                  |
|---------------------------------------------------|--------------------------------------------------|
| JURISDICTION                                      | CITY OF GAINESVILLE                              |
| EXISTING ZONING DISTRICT                          | N-B(EAST) AND O-I(WEST)                          |
| PROPOSED ZONING                                   | O-I-B (COMMUNITY BUSINESS)                       |
| OVERLAY DISTRICT                                  | GAINESVILLE GATEWAY DISTRICT                     |
| PROPOSED USE                                      | C-STORE/RESTAURANT                               |
| TOTAL SITE AREA                                   | 1.28 AC                                          |
| PROPOSED BUILDINGS                                | 4,200 S.F. C-STORE<br>1,500 S.F. RESTAURANT      |
| FRONT BUILDING SETBACK                            | 45' (ALL STREETS)                                |
| SIDE BUILDING SETBACK                             | 0'                                               |
| REAR BUILDING SETBACK                             | 0'                                               |
| ALTERNATE SIDE SETBACK IF DRIVING IN R/W OR ALLEY | 45'                                              |
| MIN. BUFFER ADJACENT TO RESIDENTIAL ZONING        | 15' (20' IF ADJACENT TO RESIDENTIAL SUBDIVISION) |
| MINIMUM LANDSCAPE STOP                            | 75R                                              |
| MAX % COVERAGE                                    | 75R                                              |

| PARKING SUMMARY                                                 |         |                    |
|-----------------------------------------------------------------|---------|--------------------|
| STALLS                                                          | MINIMUM | MAXIMUM   PROVIDED |
|                                                                 | 21      | 28   21            |
| REQUIREMENTS BASED ON:                                          |         |                    |
| • CONVENIENCE FOOD STORES: BETWEEN 26 S.F. AND 36 S.F.          |         |                    |
| • EATING & DRINKING ESTABLISHMENTS: BETWEEN 36 S.F. AND 36 S.F. |         |                    |

ADDITIONAL NOTES:  
• ON-1 PARCELS WILL REQUIRE RE-ZONING TO N-B.  
• GATEWAY OVERLAY DISTRICT REQUIRES PARKING TO BE AT THE SIDE OR REAR OF THE BUILDING.

# PRELIMINARY CONCEPT

NOTE: THIS CONCEPTUAL DESIGN SHOULD BE UTILIZED AS A GRAPHICAL REPRESENTATION OF A POSSIBLE DESIGN CHOICE. THE INFORMATION ON THIS PLAN WAS DESIGNED FROM LIMITED MATERIAL AND HAS ITS INACCURACIES. THEREFORE IT SHOULD NOT BE USED FOR CONSTRUCTION UNLESS ALL APPLICABLE MATERIAL, METHODS HAVE BEEN REVIEWED AND INCORPORATED.

**DRAFT**

THE CONTINEO GROUP

372 OXDALE ROAD / ATLANTA, GA 30307  
PHONE: 404.601.6801 / WWW.CONTINEOGROUP.COM

| # | DATE | REVISIONS | BY |
|---|------|-----------|----|
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PETROLEUM DEVELOPMENT, LLC

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1281 THOMPSON BRIDGE ROAD  
C-STORE CONCEPT

JURISDICTION: CITY OF GAINESVILLE  
PIN: 19093100700

LOCATION: 2700 MUSTELL ROAD SW,  
MARIETTA, GA, 30066

CHECKED BY:  
RTC

DRAWN BY:  
KJH

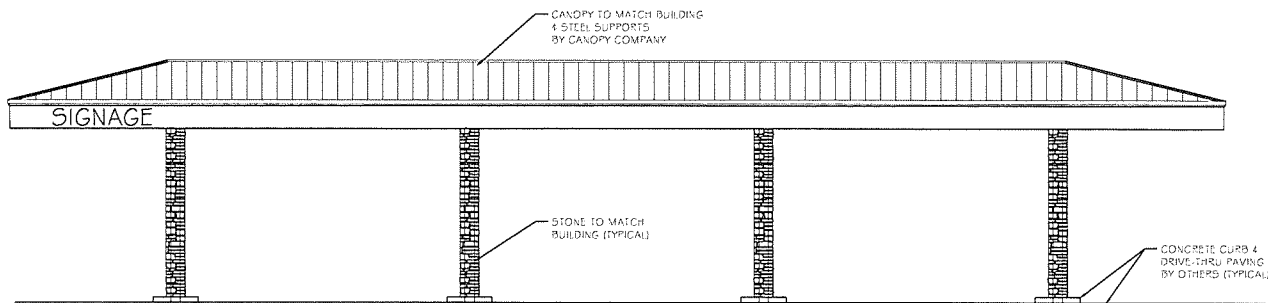
CONCEPT PLAN

JOB NO: 17-107  
DATE: 02/02/17

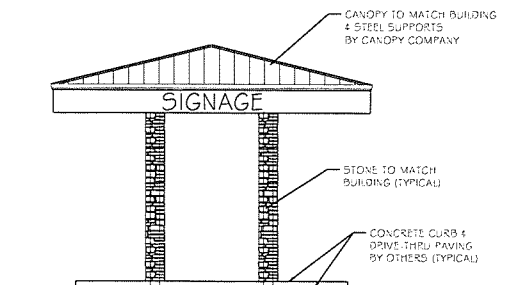
SHEET CSP02  
OF SHEETS







1 GAS PUMP CANOPY ELEVATIONS  
CPO1 SCALE: 1/8" = 1'-0"



2 GAS PUMP CANOPY END ELEVATIONS  
CPO1 SCALE: 1/8" = 1'-0"

## **Traffic Impact Study**

Proposed Convenience Store with Gasoline Pumps  
Thompson Bridge Road (GA 60) at Enota Avenue  
City of Gainesville, Georgia

February 23, 2017  
Revised April 19, 2017

**MARC R. ACAMPORA, PE, LLC**  
TRAFFIC ENGINEERING



## Traffic Impact Study

Proposed Convenience Store with Gasoline Pumps  
Thompson Bridge Road (GA 60) and Enota Avenue  
City of Gainesville, Georgia

study prepared for:

Montecito Developments, LLC  
2607 Vineville Avenue, Suite 205  
PO Box 13  
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February 23, 2017  
Revised April 19, 2017



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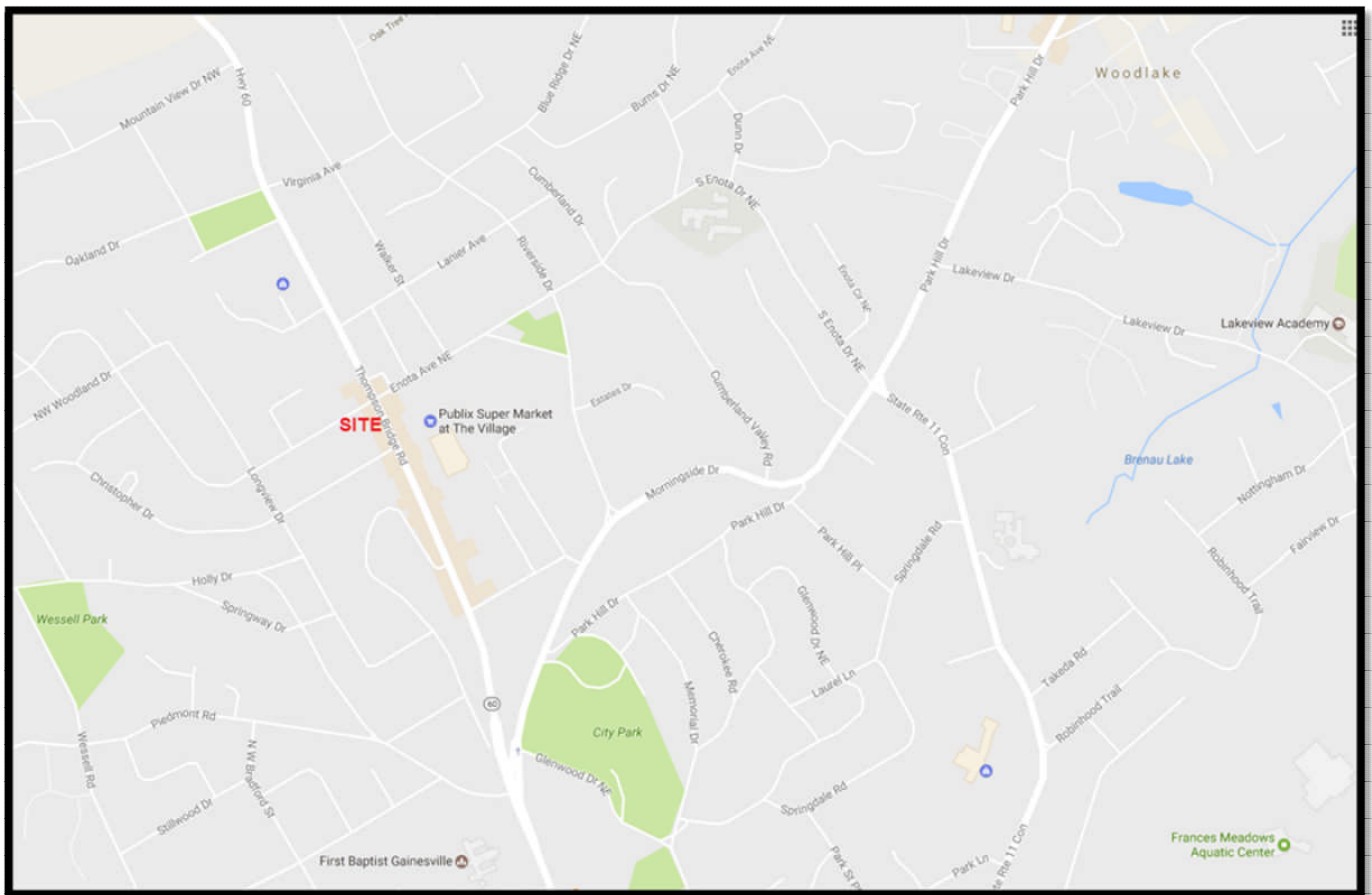
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## Introduction

This study assesses the traffic impact of a proposed convenience store with gasoline pumps in Gainesville, Georgia. The site is located in the southwest corner of the intersection of Thompson Bridge Road (GA 60) and Enota Avenue, as shown in the location map in Figure 1. The project will include a 4,200 square foot convenience store with four gasoline pumps (eight fueling positions). Vehicular access will be provided at one full-movement driveway on the south side of Enota Avenue and one full-movement driveway on the west side of Thompson Bridge Road.

The purpose of this traffic impact study is to determine existing traffic operating conditions in the vicinity of the proposed development, project future traffic volumes, assess the impact of the subject development, then develop conclusions and recommendations to mitigate the project traffic impact and ensure safe and efficient existing and future traffic conditions in the vicinity of the project.



**Figure 1 – Convenience Store Site Location Map**

## Existing Traffic Conditions

Existing traffic operating conditions in the vicinity of the proposed convenience store were assessed. The following is a description of existing transportation facilities, traffic volumes, and intersection operations.

### Study Network

The City of Gainesville's Unified Land Development Code (ULDC) specifies that the study area to be included in a traffic impact study will be determined by calculating the peak hour and daily trips that the project will generate, then applying the table provided in the code, shown as Table 1, below, to determine the distance from the project that must be included in the study area.

**Table 1 – ULDC Study Area Size Requirements**

| Peak Hour Trips Generated | Daily Trips Generated | Distance from Perimeter of Proposed Development Along Roads |
|---------------------------|-----------------------|-------------------------------------------------------------|
| 100 - 150                 | 1,000 – 1,500         | ½ mile                                                      |
| 151 - 500                 | 1,501 – 5,000         | 1 mile                                                      |
| 501 – 1,000               | 5,001 – 10,000        | 2 miles                                                     |
| 1001 or more              | 10,001 or more        | 3 miles                                                     |

from the City of Gainesville ULDC

The trip generation for the proposed development is presented later in this report, summarized in Table 4. The peak hour trip generation for the project was calculated at 153 unadjusted or 52 new trips and the 24-hour volume is 4,340 unadjusted or 1,574 new trips. Based on these numbers, applied to the ULDC standard presented above, the study network was determined to extend for one mile from the limits of the proposed site. The one mile limits were presented to the City and, based on that information, the intersections to be included in this study were agreed upon with the City as follows:

- 1) Thompson Bridge Road at Walmart / Taco Bell Access
- 2) Thompson Bridge Road / Enota Avenue
- 3) Enota Avenue at Riverside Drive
- 4) GA 11 Business at South Enota Avenue
- 5) GA 60 at GA 11 Business
- 6) GA 60 at Ridgewood Avenue

### Description of Existing Roadways

Thompson Bridge Road (Georgia State Route 60) is a principal arterial with a northwest / southeast orientation adjacent to the subject site. The road has two through lanes in each direction, with exclusive left turn lanes in both directions at Enota Avenue. The terrain along the adjacent segment of Thompson Bridge Road is very gently rolling and the posted speed limit is 40 mph in the northbound direction, changing to 45 mph just north

of Enota Avenue. Southbound, the speed limit drops from 45 mph to 40 mph along the frontage of the subject property. There is a traffic signal at the intersection of Thompson Bridge Road and Enota Avenue.

Enota Avenue is a two lane residential street that primarily serves single family subdivisions to the west of Thompson Bridge Road and a mix of single family, multi-family residential, and a school, east of Thompson Bridge Road. The eastbound approach of Enota Avenue has an exclusive left turn lane and a shared through/right at Thompson Bridge Road, while the westbound approach has separate left, through, and right turn lanes. The terrain along Enota Avenue is rolling with a downhill grade on the eastbound approach west of the site access, leveling off at Thompson Bridge Road. The westbound approach has a downhill grade approaching Thompson Bridge Road.

### Pedestrian, Bicycle, and Transit Accessibility

There are no striped designated bicycle lanes on any of the roadways in this traffic study. In the vicinity of the site, sidewalk is located in the northeast corner of the Thompson Bridge / Enota intersection, but not on the other corners. Pedestrian crossing signals and crosswalks are provided on all approaches at the Thompson Bridge / Enota intersection, but only the northeast corner is ADA accessible. There is regularly scheduled mass transit (bus) service (Gainesville Connection, Route 20) along the adjacent section of Thompson Bridge Road and Enota Avenue east of Thompson Bridge Road.

Photographs 1 through 8 are taken at each of the intersections evaluated in this study.



**Photograph 1 – View of Thompson Bridge Road Facing Walmart from Taco Bell Access**





**Photograph 2 – Thompson Bridge Road Facing North From Site Access**



**Photograph 3 – Thompson Bridge Road Facing South From Site Access**



**Photograph 4 – Enota Avenue Facing East Toward Thompson Bridge Road, Site Access to Right**



**Photograph 5 – Riverside Drive Facing North at All-Way Stop at Enota Avenue**





**Photograph 6 – GA 11 Business Facing Southwest Toward South Enota Avenue**



**Photograph 7 – Green Street Facing North at Fork with Thompson Bridge Road to Left, GA 11 Bus to Right**

**Thompson Bridge at Enota Avenue Convenience Store  
Traffic Impact Study**

**MARC R ACAMPORA, PE, LLC**



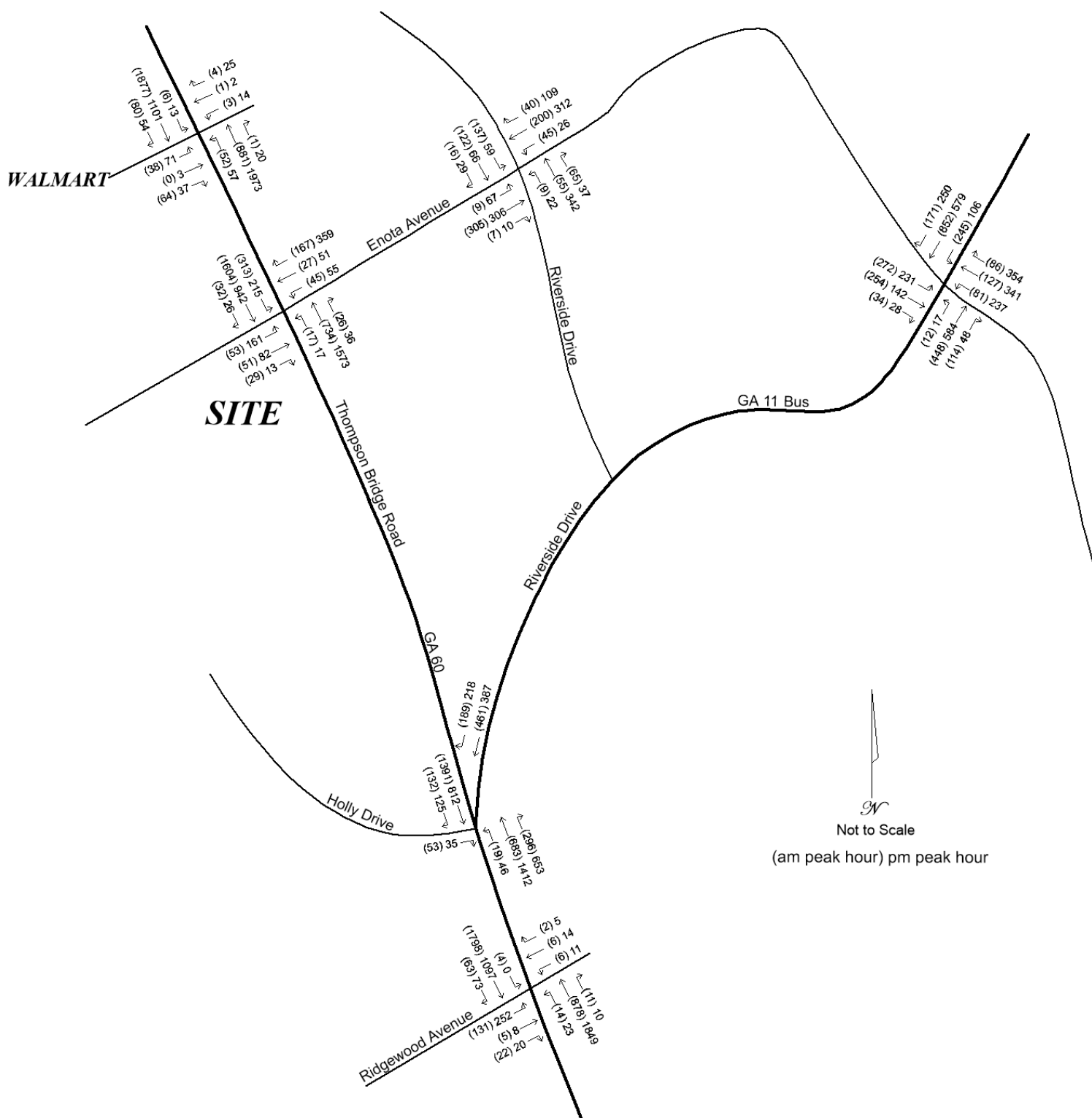


**Photograph 8 – GA 60 Facing North at Ridgewood Avenue**

### Existing Traffic Volumes

Existing full turning movement traffic volume counts were collected at the six intersections previously listed. The counts were collected at the Thompson Bridge / Enota intersection on Thursday, February 16, 2017. The counts at Thompson Bridge / Walmart, Enota / Riverside, and GA 11 Bus / South Enota were collected on Thursday, March 30, 2017, and the counts at GA 60 / GA 11 Bus and GA 60 / Ridgewood were obtained from another recent traffic study performed in the area, collected on Wednesday, February 22, 2017. Observations at the study intersections revealed that the lunchtime/midday peak volumes were visibly lower than the morning and evening peak times. Therefore, this study focused on the busier a.m. and p.m. times, with the logic that these will represent the times of day with the highest delays. The counts were collected at each intersection from 7:00 a.m. to 9:00 a.m. and from 4:00 p.m. to 6:00 p.m. Area schools were in standard session on the days on which the counts were recorded. From the count data, the highest four consecutive 15-minute interval volumes at each intersection, during each time period, were determined. These volumes make up the typical weekday a.m. and p.m. peak hour traffic volumes at that intersection. The existing a.m. and p.m. peak hour turning movement volumes are shown in Figure 2. The raw count data is found in Appendix A.

In addition to the intersection turning movement counts, Georgia Department of Transportation (Georgia DOT) annual average daily traffic (AADT) volume counts were obtained on nearby roadways for the five years from 2011 to 2015 (the latest year for which volumes are available). Table 2 presents the historic Georgia DOT counts and the annual growth rates between the counts.



## Thompson Bridge at Enota Avenue Convenience Store Traffic Impact Study

MARC R ACAMPORA, PE, LLC

**Table 2 – Historic Georgia DOT Traffic Volume Counts and Annual Growth Rates**

| Year              | GA 60 S of Enota | Annual Growth | GA 60 N of North Pointe Dr | Annual Growth | Enota W of Thompson Bridge | Annual Growth | Enota E of Thompson Bridge | Annual Growth |
|-------------------|------------------|---------------|----------------------------|---------------|----------------------------|---------------|----------------------------|---------------|
| Station ID        | 1390314          |               | 1390316                    |               | 1390612                    |               | 1390609                    |               |
| 2011              | 21,690           |               | 29,390                     |               | 1,560                      |               | 7,540                      |               |
| 2012              | 24,310           | 12.1%         | 29,010                     | -1.3%         | 1,560                      | 0.0%          | 7,410                      | -1.7%         |
| 2013              | 24,220           | -0.4%         | 30,030                     | 3.5%          | 1,590                      | 1.9%          | 7,360                      | -0.7%         |
| 2014              | 25,700           | 6.1%          | 30,000                     | -0.1%         | 1,700                      | 6.9%          | 7,360                      | 0.0%          |
| 2015              | 26,500           | 3.1%          | 31,000                     | 3.3%          | 1,760                      | 3.5%          | 7,660                      | 4.1%          |
| avg annual growth |                  | 5.1%          |                            | 1.3%          |                            | 3.1%          |                            | 0.4%          |

The AADT volume on Thompson Bridge adjacent to the subject site was 26,500 in 2015 and the AADT on Enota adjacent to the site was 1,760 in 2015.

#### Existing Intersection Operations

Existing traffic operations were analyzed at the counted intersection using Synchro software, version 8, in accordance with the methodology presented in the Transportation Research Board's 2010 *Highway Capacity Manual (HCM 2010)*. The *HCM 2010* methodology is presented in Appendix B. The results of the analysis are shown in Table 3. Computer printouts containing detailed results of the analysis are located in Appendix C. Levels of service and delays are provided for the overall intersection and for each approach or controlled movement.

**Table 3 – Existing Intersection Operations**

| Intersection / Approach                            | A.M. Peak Hour |               | P.M. Peak Hour |               |
|----------------------------------------------------|----------------|---------------|----------------|---------------|
|                                                    | LOS            | Delay (s/veh) | LOS            | Delay (s/veh) |
| 1. Thompson Bridge Road at Walmart/Taco Bell       | A              | 8.8           | B              | 11.0          |
| northbound approach Thompson Bridge                | A              | 2.8           | A              | 9.3           |
| southbound approach Thompson Bridge                | A              | 8.9           | A              | 5.7           |
| eastbound approach Walmart access                  | D              | 52.2          | E              | 69.1          |
| westbound approach Taco Bell access                | D              | 51.3          | D              | 36.5          |
| 2. Thompson Bridge Road at Enota Avenue            | B              | 11.8          | D              | 36.8          |
| northbound approach Thompson Bridge                | A              | 8.8           | D              | 36.2          |
| southbound approach Thompson Bridge                | A              | 6.4           | C              | 24.1          |
| eastbound approach Enota                           | E              | 61.1          | E              | 56.9          |
| westbound approach Enota                           | D              | 38.7          | E              | 58.7          |
| 3. Enota Avenue at Riverside Drive                 | C              | 22.1          | <b>F</b>       | <b>58.5</b>   |
| northbound approach Riverside                      | C              | 15.5          | <b>F</b>       | <b>59.3</b>   |
| southbound approach Riverside                      | C              | 22.3          | C              | 20.7          |
| eastbound approach Enota                           | C              | 22.7          | <b>F</b>       | <b>59.9</b>   |
| westbound approach Enota                           | C              | 25.0          | <b>F</b>       | <b>71.3</b>   |
| 4. GA 11 Business at South Enota Avenue            | D              | 47.4          | D              | 48.6          |
| northbound approach GA 11 Bus                      | <b>F</b>       | <b>80.1</b>   | E              | 79.2          |
| southbound approach GA 11 Bus                      | E              | 64.9          | D              | 44.7          |
| eastbound approach South Enota                     | C              | 30.2          | D              | 41.2          |
| westbound approach South Enota                     | C              | 34.4          | D              | 42.9          |
| 5. GA 60 (Green/Thompson Bridge) at GA 11 Business | C              | 23.1          | B              | 17.7          |
| northbound approach Green                          | A              | 5.6           | A              | 6.1           |
| southbound approach Thompson Bridge                | B              | 16.2          | B              | 10.8          |
| eastbound approach Holly                           | B              | 19.2          | A              | 0.5           |
| westbound approach GA 11 Bus                       | E              | 68.2          | E              | 68.1          |
| 6. GA 60 (Green) at Ridgewood Avenue               | B              | 19.6          | C              | 26.4          |
| northbound approach Green                          | A              | 6.0           | C              | 24.9          |
| southbound approach Green                          | B              | 18.5          | B              | 12.7          |
| eastbound approach Ridgewood                       | <b>F</b>       | <b>92.5</b>   | <b>F</b>       | <b>93.6</b>   |
| westbound approach driveway                        | D              | 49.6          | D              | 40.7          |

The following is a discussion of the results at each intersection:

- 1. Thompson Bridge Road at Walmart / Taco Bell** – This signalized intersection is the main access for Walmart and Taco Bell. The intersection operates well in the existing a.m. and p.m. Some delays are incurred on the side street approaches primarily due to the signal timing, appropriately, heavily favoring the northbound and southbound approaches on Thompson Bridge Road. The side street left turn lanes are extremely short, especially on the Taco Bell approach, which only provides storage for one automobile. This is generally not problematic due to the relatively low side street approach volumes. The pedestrian signal head in the southeast corner (closest to Taco Bell), for pedestrians crossing the Taco Bell access, is very difficult to see in daylight and it is recommended that this pedestrian signal head be adjusted to improve its visibility. It is also noted that the southbound approach of Thompson Bridge Road does not include an exclusive right turn lane to serve the Walmart access. This is presumably due to topographic constraints in the Walmart property. Based on the southbound right turn volume and the given conditions, a southbound right turn lane would be justified at this location according to Georgia DOT standards.
  
- 2. Thompson Bridge Road at Enota Avenue** – The analysis of the Thompson Bridge / Enota intersection shows an overall acceptable level of service. The side street approaches on Enota Avenue operate at LOS E, again, primarily due to the greentime on the signal favoring the Thompson Bridge Road approaches. Two changes to the signal operations at this intersection would be beneficial. First, the 160 second cycle length is lengthy and the Synchro analysis suggests that cycle lengths of 80 to 100 seconds are more optimal. Shorter cycle lengths would also reduce side street queuing. It is recognized that the cycle length is dependent on other signals in the corridor and spot changes at individual intersections may not be appropriate. Also, three of the four approaches (all but westbound Enota Avenue) have protected / permissive left turn phasing. There would be a modest operational benefit, and a potential safety improvement, to adding this phasing to the westbound approach. It was also noted in the field that some adjacent intersections have been converted to the flashing permissive left turn arrow, but this intersection has not.
  
- 3. Enota Avenue at Riverside Drive** – This all-way stop intersection operates well in the a.m., but at LOS F in the p.m. The volumes at this intersection are such that exclusive turn lanes are appropriate for several movements. However, to avoid confusion about right-of-way, it is generally not advisable to add multiple approach lanes at an all-way stop sign-controlled intersection. This intersection may be a candidate for signalization. It is recommended that a signal warrant analysis be performed for this intersection according to the standards proscribed in the Federal Highway Administration's *Manual On Uniform Traffic Control Devices* (MUTCD). Should signalization be justified, consideration could be given to providing turn lanes, as appropriate. With a simple two-phase signal and no additional turn lanes, this intersection would operate at LOS B in the a.m. peak hour and LOS A in the p.m. peak hour. It is noted that Enota Avenue has received traffic calming treatment including highly-visible pedestrian crossings with speed humps. The all-way stop at the Enota / Riverside intersection provides a traffic calming function which may be diminished if this intersection was signalized. A roundabout is an alternative method of control that merits consideration at this intersection. The analysis of a

roundabout at this intersection reveals excellent operations, with LOS A in the a.m. and LOS B in the p.m.

4. **GA 11 Bus at South Enota Avenue** – There are no exclusive right turn lanes on either GA 11 Bus approach at this intersection. The northbound right turn volumes (114 a.m., 48 p.m.) and, even more significantly, the southbound right turn volumes (171 a.m., 250 p.m.) on GA 11 Bus justify the addition of these exclusive right turn lanes. The addition of these lanes will reduce overall intersection delays by about 10 seconds per vehicle in each time period and will eliminate the a.m. northbound LOS F. The signal includes protected/permissive phasing on all but the northbound approach, which has permissive-only phasing. This is acceptable given the low northbound left turn volumes on GA 11 Bus.
5. **GA 60 (Thompson Bridge Road / Green Street) at GA 11 Business** – This large intersection is the fork at which GA 11 Business (Riverside Drive) splits from GA 60 (Thompson Bridge Road). This intersection generally operates acceptably with the existing lanes and control. The southbound right turn volume into Holly Drive operates beyond the signal control. The volume of these right turners are high enough to justify a southbound exclusive right turn lane on GA 60, according to Georgia DOT standards. No other mitigation is recommended at this intersection.
6. **GA 60 (Green Street) at Ridgewood Avenue** – This overall intersection operates acceptably, especially given the tight urban design and lack of exclusive turn lanes. Northbound left turns from GA 60 receive a protected/permissive phasing on the signal and, with the modest northbound left turn volume, this generally provides acceptable operations. However, should a left turner not reach the intersection and complete their left turn movement during the protected portion of the phase, that left turner can significantly impede the through traffic in that lane. Likewise, eastbound Ridgewood Avenue only includes a single lane and, at times, notable queuing was observed on this approach. Ideally, from a traffic operations perspective, this intersection would be widened to include a northbound exclusive left turn lane on GA 60, a second eastbound lane on Ridgewood, and a southbound right turn lane on GA 60. These changes would reduce overall delays and eliminate the LOS F on the Ridgewood approach. However, it is acknowledged that this widening would alter the historic character of this intersection. Therefore, these improvements are suggested for consideration in the context of the overall character and goals of the community.

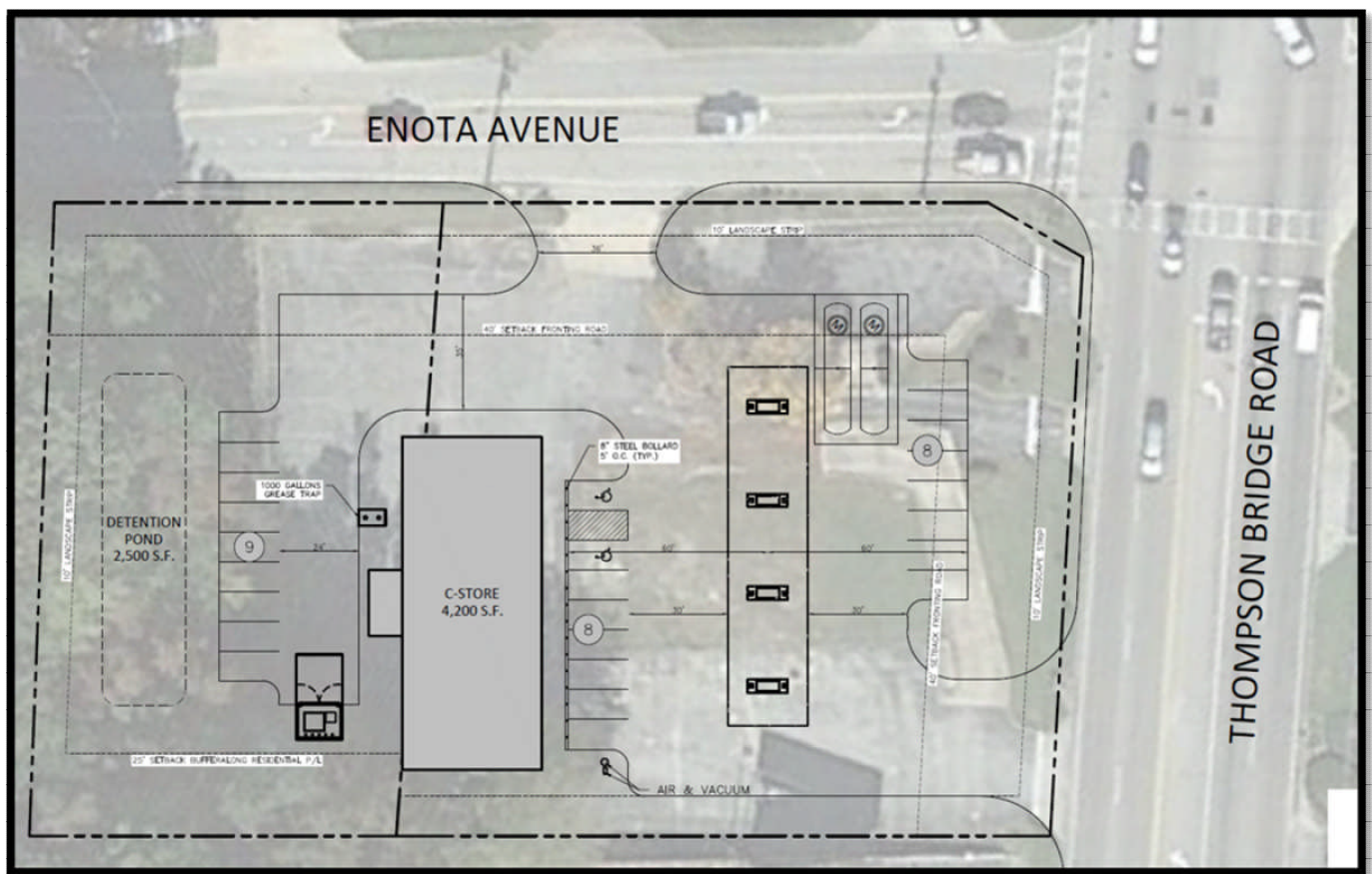


## Project Traffic Characteristics

This section describes the anticipated traffic characteristics of the proposed convenience store, including a site description, how much traffic the project will generate, and where that traffic will travel.

### Project Description

The proposed development will consist of a 4,200 square foot convenience store with four gasoline pumps (eight fueling positions). Access to the property will be provided by a full movement driveway on Enota Avenue and a full movement driveway on Thompson Bridge Road. The site plan is presented in Figure 3.



**Figure 3 – Site Plan**

It is noted that the current site has three accesses on Thompson Bridge Road – an enter-only lane right at the corner, an exit-only lane a few feet to the south, then a full-movement access at the south property line. The proposed convenience store site plan calls for closing the two accesses near the Enota intersection and preserving just the one full-movement access at the south end of the property. The property also has a single, existing full movement access on Enota Avenue, which will be preserved.

## Trip Generation

Trip generation is an estimate of the number of entering and exiting vehicular trips that will be generated by the proposed development. The volume of traffic that will be generated by the proposed convenience store was calculated using the rates and equations in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 9<sup>th</sup> Edition. ITE Land Use 853 – Convenience Market with Gasoline Pumps was applied. The trip generation was calculated both by using square footage as the independent variable and also using number of fueling positions as the independent variable. The square footage yielded the higher peak hour trip volumes while the fueling positions yielded the higher 24-hour volumes. The average number of fueling positions in the ITE data was 7 for the a.m. peak hour and 8 for the p.m. peak hour data (this site plan calls for 8). The average square footage in the ITE data was 3,000. Since no equations were available and the average rates were, therefore, employed, it was decided to use the number of fueling positions as the independent variable, since the average size of that variable more-closely mirrored that of the proposed development.

The trip generation was adjusted to account for pass-by trips. Pass-by trips are trips to the proposed convenience store that are currently driving on Thompson Bridge Road and Enota Avenue and which will turn into the site for retail / gasoline purchases, then continue on the trip they are already making. The ITE *Trip Generation Manual* provides data for calculating pass-by percentages. This data showed an average pass-by percentage in the a.m. peak hour of 63% and average in the p.m. peak hour of 66%. These high percentages are logical given the nature of the development. The a.m. percentage of 63% was also applied to the 24-hour volumes. Table 4 summarizes the trip generation calculations for the proposed development. The calculations include the raw trips for the convenience store and the pass-by percentages.

**Table 4 – Project Trip Generation**

| Land Use                               | ITE Code | Size                | A.M. Peak Hour |            |            | P.M. Peak Hour |            |             | 24-Hour       |
|----------------------------------------|----------|---------------------|----------------|------------|------------|----------------|------------|-------------|---------------|
|                                        |          |                     | In             | Out        | Total      | In             | Out        | Total       | 2-Way         |
| Convenience Market with Gasoline Pumps | 853      | 8 fueling positions | 67             | 66         | 133        | 76             | 77         | 153         | 4,340         |
| -pass-by                               |          | 63%/66%/63%         | <u>-42</u>     | <u>-42</u> | <u>-84</u> | <u>-50</u>     | <u>-51</u> | <u>-101</u> | <u>-2,766</u> |
| Total New Trips                        |          |                     | 25             | 24         | 49         | 26             | 26         | 52          | 1,574         |

## Trip Distribution and Assignment

The trip distribution percentages indicate what proportion of the project's trips will travel to and from various directions. The new trip distribution percentages were developed based on the locations and proximity of likely trip origins and destinations, primarily residential development in the area, and the routes of travel to and from those areas. The pass-by trips were assigned based on the prevailing flows passing the site. The project trips, shown in Table 4, were assigned to the roadway network based on the trip distribution percentages. The project trip distribution percentages and the a.m. and p.m. peak hour trips expected to be generated by the project are shown in Figure 4.



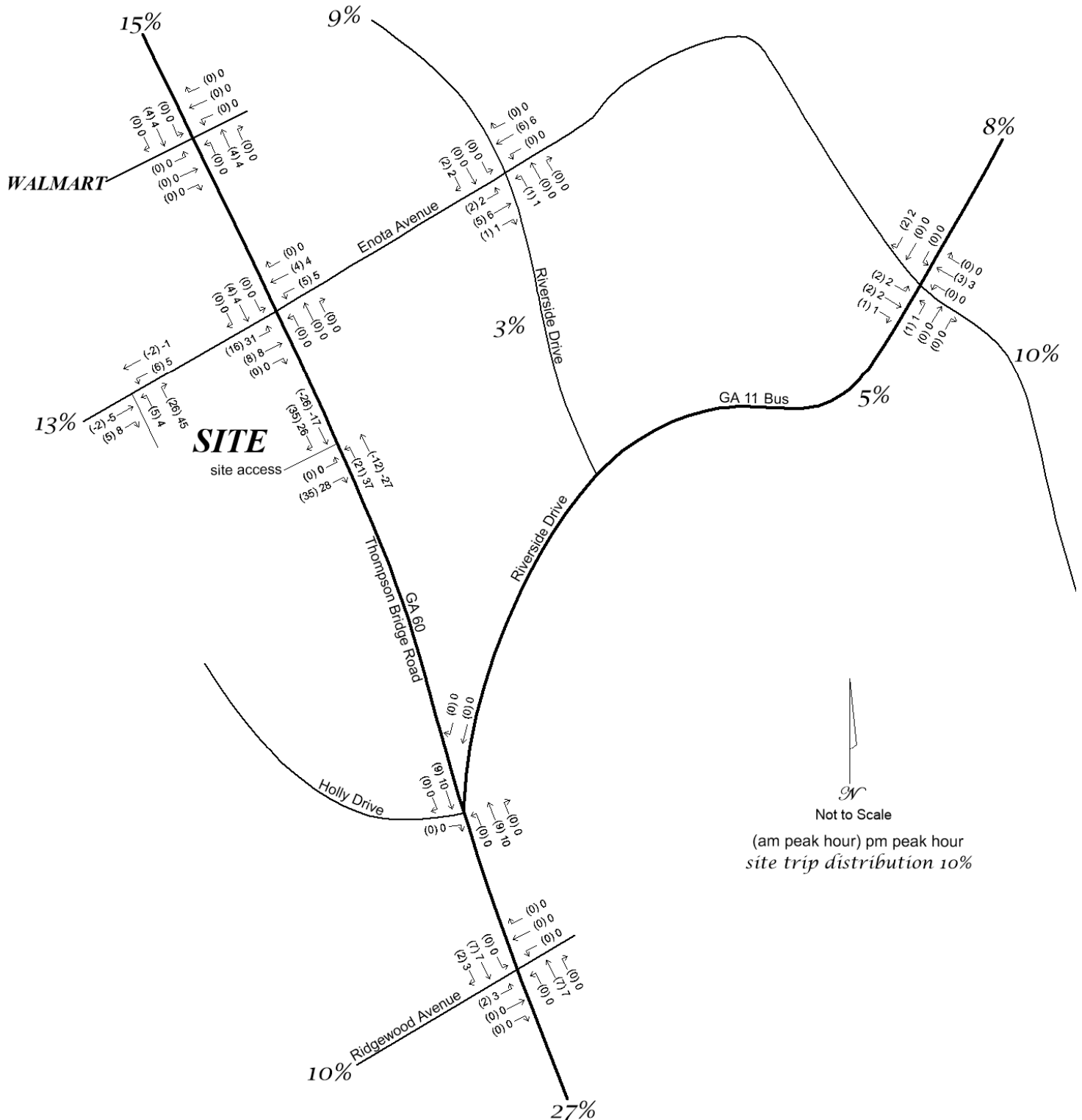


Figure 4 – Project Trip Distribution Percentages and Weekday A.M. and P.M. Peak Hour Site Trips

## Future Traffic Conditions

The historic growth trends identified previously in Table 2, were used to develop an annual growth rate in traffic volumes of 3%, or a total of 6.1% for the projected two year project build-out horizon. This growth rate was applied to the counted volumes at the counted study intersections and at the site access locations. Then, the site traffic volumes were added to these volumes. The site volumes, shown in Figure 4, were added to the 2019 background volumes. This produces the future volumes that will be at each study intersection after the convenience store is built and operational. These future volumes are shown in Figure 5.

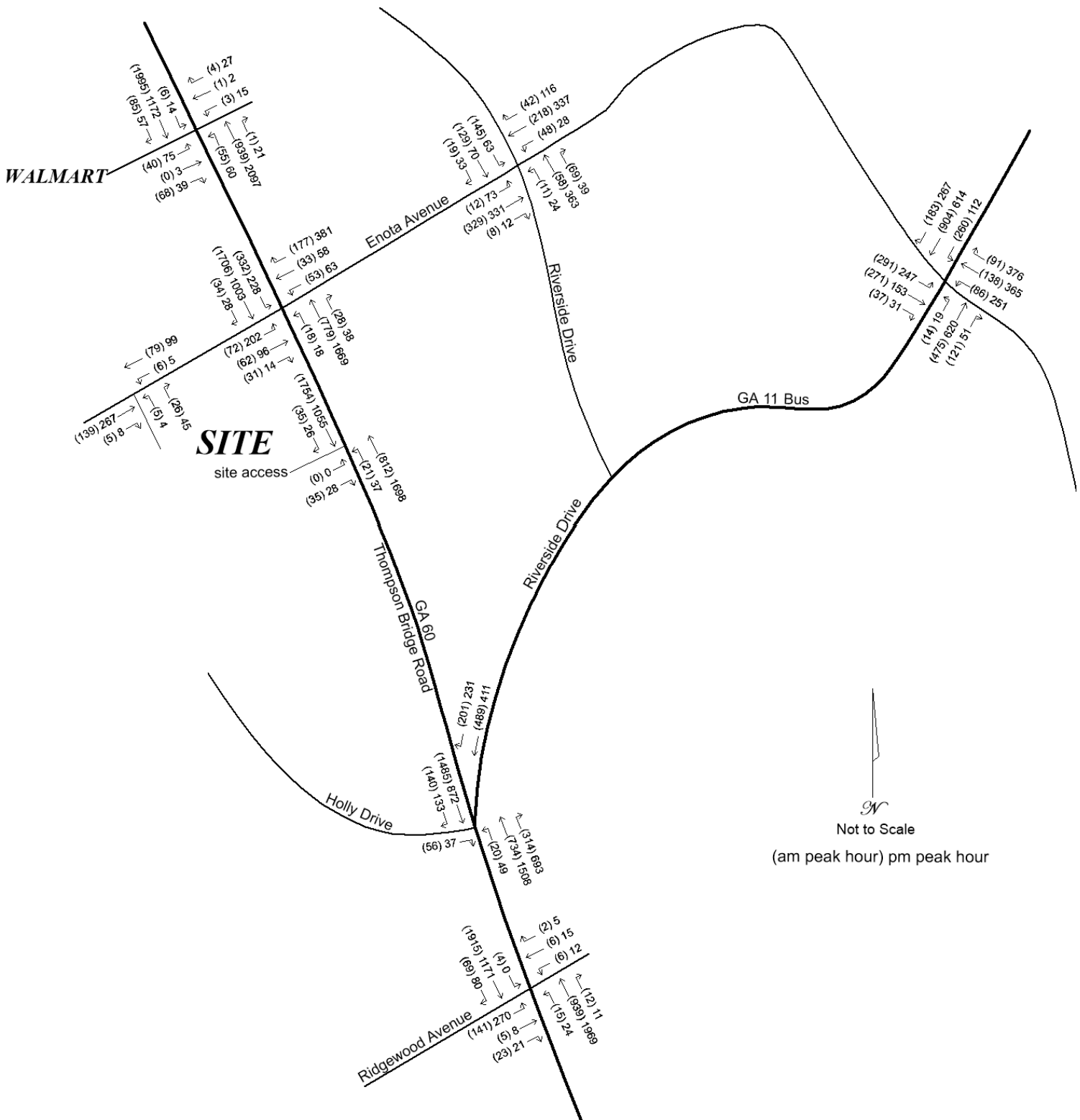


Figure 5 – Future Weekday A.M and P.M. Peak Hour Traffic Volume Projections

## Future Intersection Operations

An operational analysis was performed for the anticipated 2019 future project build-out year, at the study intersections and the proposed site accesses. Table 5 presents the results of this analysis. Computer printouts containing detailed results of the analysis are located in Appendix D.

**Table 5 – Future Intersection Operations**

| Intersection / Approach                            | A.M. Peak Hour |               | P.M. Peak Hour |               |
|----------------------------------------------------|----------------|---------------|----------------|---------------|
|                                                    | LOS            | Delay (s/veh) | LOS            | Delay (s/veh) |
| 1. Thompson Bridge Road at Walmart/Taco Bell       | B              | 10.6          | B              | 11.8          |
| northbound approach Thompson Bridge                | A              | 4.0           | B              | 10.2          |
| southbound approach Thompson Bridge                | B              | 11.1          | A              | 5.9           |
| eastbound approach Walmart access                  | D              | 52.9          | E              | 71.2          |
| westbound approach Taco Bell access                | D              | 51.0          | D              | 36.4          |
| 2. Thompson Bridge Road at Enota Avenue            | B              | 13.5          | D              | 40.6          |
| northbound approach Thompson Bridge                | A              | 9.1           | D              | 37.9          |
| southbound approach Thompson Bridge                | A              | 8.3           | C              | 26.9          |
| eastbound approach Enota                           | E              | 61.3          | E              | 59.4          |
| westbound approach Enota                           | D              | 39.6          | E              | 71.0          |
| 3. Enota Avenue at Riverside Drive                 | D              | 32.1          | <b>F</b>       | <b>66.5</b>   |
| northbound approach Riverside                      | C              | 19.0          | <b>F</b>       | <b>72.7</b>   |
| southbound approach Riverside                      | D              | 30.9          | C              | 23.2          |
| eastbound approach Enota                           | D              | 33.7          | <b>F</b>       | <b>73.0</b>   |
| westbound approach Enota                           | E              | 39.0          | <b>F</b>       | <b>72.3</b>   |
| 4. GA 11 Business at South Enota Avenue            | E              | 56.4          | E              | 56.6          |
| northbound approach GA 11 Bus                      | <b>F</b>       | <b>94.5</b>   | <b>F</b>       | <b>83.7</b>   |
| southbound approach GA 11 Bus                      | <b>F</b>       | <b>80.4</b>   | D              | 46.8          |
| eastbound approach South Enota                     | C              | 25.8          | D              | 49.2          |
| westbound approach South Enota                     | D              | 43.9          | E              | 58.5          |
| 5. GA 60 (Green/Thompson Bridge) at GA 11 Business | C              | 28.0          | C              | 23.3          |
| northbound approach Green                          | A              | 6.2           | A              | 7.8           |
| southbound approach Thompson Bridge                | C              | 26.3          | C              | 29.3          |
| eastbound approach Holly                           | C              | 23.9          | A              | 0.5           |
| westbound approach GA 11 Bus                       | E              | 67.8          | E              | 66.9          |
| 6. GA 60 (Green) at Ridgewood Avenue               | B              | 17.3          | C              | 32.3          |
| northbound approach Green                          | A              | 6.3           | C              | 32.4          |
| southbound approach Green                          | B              | 14.1          | B              | 14.6          |

|                                        |          |              |          |              |
|----------------------------------------|----------|--------------|----------|--------------|
| eastbound approach Ridgewood           | <b>F</b> | <b>100.1</b> | <b>F</b> | <b>105.1</b> |
| westbound approach driveway            | D        | 50.4         | D        | 43.0         |
| 7. Thompson Bridge Road at Site Access | A        | 0.5          | A        | 0.3          |
| northbound left turn entering site     | C        | 18.2         | B        | 11.4         |
| eastbound approach exiting site        | C        | 22.5         | B        | 13.5         |
| 8. Enota Avenue Site Access            | A        | 1.4          | A        | 1.4          |
| westbound left turn entering site      | A        | 7.5          | A        | 7.9          |
| northbound approach exiting site       | A        | 9.3          | B        | 10.6         |

The following is a discussion of these results at each intersection:

- 1. Thompson Bridge Road at Walmart / Taco Bell** – This intersection will continue to operate well in the future a.m. and p.m. Some increases in delays will be experienced on the side street approaches, again primarily due to the signal timing, appropriately, heavily favoring the northbound and southbound approaches on Thompson Bridge Road. No other changes, beyond those identified in the existing analysis, are recommended for this intersection.
- 2. Thompson Bridge Road at Enota Avenue** – The Thompson Bridge / Enota intersection will continue to operate acceptably with the addition of the traffic from the proposed convenience store. The addition of an eastbound exclusive right turn lane along the subject site frontage would prevent right turners from becoming trapped behind eastbound through vehicles. The side street approaches would experience a slight improvement in levels of service with this right turn lane, but reductions in delays on the Thompson Bridge approaches and for the overall intersection would be minimal.
- 3. Enota Avenue at Riverside Drive** – The delays will increase at this intersection in the future, though it is noted that the proposed convenience store will add only a modest volume of new trips to this intersection (17 in the a.m. peak hour, total in all directions, and 18 in the p.m. peak hour). Consistent with the existing recommendations, this intersection would benefit from signalization or a roundabout.
- 4. GA 11 Bus at South Enota Avenue** – The delays at this intersection will also increase in the future, and, as with the Enota / Riverside intersection, the proposed development will add only a small volume of new trips here. The discussion of the exclusive right turn lanes in the existing analysis is still applicable for the future condition. No additional changes are recommended.
- 5. GA 60 (Thompson Bridge Road / Green Street) at GA 11 Business** – This intersection will generally continue to operate acceptably in the future. No other mitigation is recommended at this intersection for the future.
- 6. GA 60 (Green Street) at Ridgewood Avenue** – This intersection will operate in the future comparably to existing conditions. The delays on the eastbound Ridgewood approach will increase and be

unacceptable. The existing analysis discussion about widenings at this intersection are still applicable for the future condition, with no additional changes identified.

**7. Thompson Bridge Road at Site Access** – The assignment of site trips assumed that no left turners would exit the site driveway onto Thompson Bridge Road. Without a specific exiting left turn prohibition, a few vehicles may attempt this movement. However, with the high volumes and number of lanes to cross on Thompson Bridge, it is considered highly probable that most vehicles that wish to travel either northbound on Thompson Bridge or to the east on Enota will exit the site at the Enota driveway and capitalize on the protection of the adjacent signal. Because of the difficulty in making this left turn from the site driveway, and the low numbers of vehicles expected to do so, consideration should be given to prohibiting exiting left turns from this driveway. The Georgia DOT access standards were reviewed for this intersection (Thompson Bridge is Georgia State Route 60) and these are presented below.

**8. Enota Avenue at Site Access** – The site access on Enota is projected to operate with low volumes and very low delays. Most of the site entering trips will enter at the Thompson Bridge access, so that the entering left turns at the Enota driveway are projected at only 6 vehicles in the a.m. peak hour and 5 in the p.m. peak hour. This should minimally impede westbound through flow on Enota. The eastbound right turns entering the site are also minimal, at 5 for the a.m. peak hour and 8 for the p.m. peak hour. This also should minimally impede flows on Enota.

#### Site Access Design and Georgia DOT Access Standards

Thompson Bridge Road is Georgia State Route 60, and, therefore, Georgia DOT access standards apply to the Thompson Bridge access. The site is currently served by three access points on Thompson Bridge Road. The two northernmost driveways will be eliminated by the proposed plan, leaving only one access on Thompson Bridge, at the southern end of the property (furthest from Enota Avenue). The standards proscribed in the Georgia DOT's *Regulations for Driveway and Encroachment Control* (Driveway Manual), revision 4.0, dated 3/15/2016, were reviewed for applicable design standards for the site access on GA 60, and are discussed as follows.

There is an existing two way left turn lane on GA 60, which becomes a northbound exclusive left turn lane along the site frontage, serving Enota Avenue. This left turn lane will also serve as the left turn lane for the proposed convenience store. The northbound left turn movement from Thompson Bridge to Enota, at the nearby signal, has a very modest volume (17 existing in each a.m. and p.m. peak hour) and has protected / permissive phasing. This phasing will also provide some protection and gaps for the left turners into the site access. One potential issue is left turners into the site stopping in the left turn lane at the site access, blocking left turners who wish to turn at Enota, but who queue behind the site left turners. This problem is exacerbated by the proximity of the site access to Enota Avenue. Conversely, the potential for this conflict is somewhat mitigated by the modest volumes actually turning left at Enota Avenue.

It is also noted that there is an access to a retail shopping center (Publix) on the east side of GA 60 which is slightly offset to the south from the proposed site access. At this point on the road, the striping indicates a

northbound left turn lane to Enota, and southbound left turners should not be using that lane to turn left into the Publix center. However, there is always the potential for conflict for opposing left turners at the two driveways (Publix and the subject site). Should left turn conflicts present a problem, it may be beneficial to limit the Publix access to right-in / right-out (RIRO) operations. Since the existing northbound left turn lane on GA 60 will serve the site access, no auxiliary lane analysis was performed for the need for this left turn lane.

The Georgia DOT standards for right turn lanes were reviewed for the site access on GA 60. Table 6, below, is Table 4-6 from the Driveway Manual, and proscribes the right turn volume thresholds at which exclusive right turn lanes must be provided.

**Table 6 – Georgia DOT Minimum Volume Requirements for Right Turn Lanes**

| Posted Speed   | 2 Lane Routes |               | More than 2 Lanes on Main Road |               |
|----------------|---------------|---------------|--------------------------------|---------------|
|                | AADT          |               | AADT                           |               |
|                | < 6000        | >=6000        | <10000                         | >=10000       |
| 35 MPH or Less | 200 RTV a day | 100 RTV a day | 200 RTV a day                  | 100 RTV a day |
| 40 to 50 MPH   | 150 RTV a day | 75 RTV a day  | 150 RTV a day                  | 75 RTV a day  |
| 55 to 60 MPH   | 100 RTV a day | 50 RTV a day  | 100 RTV a day                  | 50 RTV a day  |
| >= 65 MPH      | Always        | Always        | Always                         | Always        |

**Table 4-6 Minimum Volumes Requiring Right Turn Lanes**

As reported earlier, the 2015 AADT on Thompson Bridge Road is 26,500 vpd. The southbound right turn volume (RTV) per day at the GA 60 access is calculated as 35% of the site entering new trips ( $35\% \times 787 = 275$ ) plus an estimated 50% of the site entering pass-by trips ( $50\% \times 1,383 = 692$ ) for an entering right turn volume of 967 RTV per day. This substantially exceeds the Georgia DOT threshold of 75 RTV per day. Therefore, an exclusive right turn lane is required at the site access on Thompson Bridge Road according to Georgia DOT standards.

Table 7, below, is Table 4-8 from the Driveway Manual and proscribes the right turn lane design standards. As noted previously, the posted speed limit changes along the subject property frontage, dropping from 45 mph to 40 mph, so the right turn lane would be partially in each speed zone. At 40 mph, the standard for right turn lanes is 150 feet of full-width storage and a 50 foot taper. At 45 mph, the standard is 175 feet of full-width storage and a 100 foot taper. Most of the lane would be in the 45 mph zone and this would provide the more conservative design. However, it is also noted that the distance from the south curb on Enota to the north curb of the site access scales to approximately 150 feet. Therefore, insufficient distance is available to provide the required storage plus taper at either speed standard. The Georgia DOT spacing standards are proscribed in Driveway Manual Table 3-1 – Spacing Criteria for Driveways, Public Road, and Side Streets. At 45 mph, the minimum spacing is 230 feet, which is also not satisfied by the proposed design, either between the site access and Enota Avenue or between the site access and the existing driveway to the property to the south. It is recommended that these design factors be discussed with Georgia DOT and the City to determine an acceptable solution. Consideration should be given to the fact that the proposed plan does eliminate two of the three existing accesses along the subject frontage, thus reducing conflict points and providing an improved design over the existing condition.

**Table 7 – Georgia DOT Design Standards for Right Turn Lanes**

| Speed, mph | Full Width Storage, ft. | Taper, ft. |
|------------|-------------------------|------------|
| 25         |                         | 50         |
| 30         | 75                      | 50         |
| 35         | 100                     | 50         |
| 40         | 150                     | 50         |
| 45         | 175                     | 100        |
| 50         | 225                     | 100        |
| 55         | 250                     | 100        |
| 60         | 300                     | 100        |
| 65         | 350                     | 100        |

**Table 4-8 Minimum Right Turn Deceleration Lengths**

The Thompson Bridge Road site access should be constructed with one entering and one exiting lane and the exiting approach should be controlled by stop sign and accompanying stop bar. As discussed above, consideration should be given to prohibiting exiting left turns at this driveway. The project site engineer is referred to the Georgia DOT Driveway Manual for other driveway design standards including driveway width, island design, and curb return radii.

The site access on Enota Avenue is not located on a Georgia state route and, therefore, Georgia DOT design standards do not apply. This access is located approximately mid-way along the site's Enota frontage. This design is logical since it places the access approximately at the front of the convenience store building. The potential does exist for entering left turners to block the westbound through movement on Enota Avenue. However, due to the low entering left turn volume (6 in the a.m. peak hour, 5 in the p.m. peak hour), this potential is minimal.

The Enota Avenue site access should be constructed with one entering and one exiting lane and the exiting approach should be controlled by stop sign and accompanying stop bar. It is also noted that there is a grade differential between the site and Enota Avenue at the location of the existing access, creating a steep grade and acute crown in the existing apron. This should be addressed by the proposed site plan.



## Conclusions and Recommendations

The traffic impact of this proposed convenience store with gasoline pumps will occur primarily at the site driveways. The impact at adjacent intersections will be minimal to negligible. The reason the impact is so minimal is that the majority of trips to and from the site will be pass-by trips. The nature of this type of convenience store and gasoline station is to attract vehicles that are already passing by the site – it is minimally destination-oriented. Of those trips that are driving specifically to this store, most will be generated very locally. It is improbable that more than just a few trips will travel specifically to this store from more than about one to two miles. Therefore, the new trips from this project at most study intersections will be very low, having minimal effect on traffic operations. The following is a summary of the conclusions and recommendations of at each intersection:

- 1. Thompson Bridge Road at Walmart / Taco Bell** – This intersection operates well in the existing a.m. and p.m. and will continue to operate well in the future. The pedestrian signal head in the southeast corner (closest to Taco Bell), for pedestrians crossing the Taco Bell access, is very difficult to see in daylight and it is recommended that this pedestrian signal head be adjusted to improve its visibility. It is also noted that the southbound approach of Thompson Bridge Road does not include an exclusive right turn lane to serve the Walmart access. Based on the southbound right turn volume and the given conditions, a southbound right turn lane would be justified at this location according to Georgia DOT standards.
- 2. Thompson Bridge Road at Enota Avenue** – The analysis of the Thompson Bridge / Enota intersection shows an overall acceptable level of service in both the existing and future conditions. The side street approaches on Enota Avenue operate at LOS E, primarily due to the greentime on the signal favoring the Thompson Bridge Road approaches. Shorter cycle lengths would reduce delays and side street queuing. While there are crosswalks and pedestrian signals on all approaches at this signalized intersection, only the northeast corner has an ADA accessible ramp. Consideration should be given to adding ADA ramps on the remaining corners. The crosswalk and stop bar striping is also in poor condition and should be refreshed.
- 3. Enota Avenue at Riverside Drive** – This all-way stop intersection currently operates well in the a.m., but at LOS F in the p.m. In the future, these delays will increase. It is recommended that a signal warrant analysis be performed for this intersection according to the standards proscribed in the Federal Highway Administration's *Manual On Uniform Traffic Control Devices* (MUTCD). Should signalization be justified, consideration could be given to providing approach turn lanes, as appropriate. A roundabout is an alternative method of control that merits consideration at this intersection.
- 4. GA 11 Bus at South Enota Avenue** – The existing northbound right turn volumes (114 a.m., 48 p.m.) and, even more significantly, the southbound right turn volumes (171 a.m., 250 p.m.) on GA 11 Bus justify the addition of exclusive right turn lanes.
- 5. GA 60 (Thompson Bridge Road / Green Street) at GA 11 Business** – This intersection generally operates acceptably with the existing lanes and control, and will continue to operate acceptably in the future.

The southbound right turn volume into Holly Drive operates beyond the signal control. The volume of these right turners are high enough to justify a southbound exclusive right turn lane on GA 60, according to Georgia DOT standards. No other mitigation is recommended at this intersection.

**6. GA 60 (Green Street) at Ridgewood Avenue** – This overall intersection operates acceptably, especially given the tight urban design and lack of exclusive turn lanes, but delays are high at times on the eastbound approach of Ridgewood. Ideally, from a traffic operations perspective, this intersection would be widened to include a northbound exclusive left turn lane on GA 60, a second eastbound lane on Ridgewood, and a southbound right turn lane on GA 60. These changes would reduce overall delays and eliminate the LOS F on the Ridgewood approach. However, it is acknowledged that this widening would alter the historic character of this intersection. Therefore, these improvements are suggested for consideration in the context of the overall character and goals of the community.

**7. Thompson Bridge Road at Site Access** – The site plan calls for the elimination of two of the three existing site accesses on Thompson Bridge Road. This will reduce the number of conflict points. It is likely that most vehicles that wish to travel either northbound on Thompson Bridge or to the east on Enota will exit the site at the Enota driveway and capitalize on the protection of the adjacent signal. Because of the difficulty in making this left turn from the site driveway, and the low numbers of vehicles expected to do so, consideration should be given to prohibiting exiting left turns from this driveway. The Georgia DOT access standards were reviewed for this intersection (Thompson Bridge is Georgia State Route 60) and indicate that the access justifies a southbound exclusive right turn lane. The spacing of this driveway from Enota Avenue does not meet the minimum Georgia DOT driveway spacing standards. It is recommended that these design factors be discussed with Georgia DOT and the City to determine an acceptable solution. The Thompson Bridge Road site access should be constructed with one entering and one exiting lane and the exiting approach should be controlled by stop sign and accompanying stop bar. The project site engineer is referred to the Georgia DOT Driveway Manual for other driveway design standards including driveway width, island design, and curb return radii.

**8. Enota Avenue at Site Access** – The site access on Enota is projected to operate with low volumes and very low delays. Most of the site entering trips will enter at the Thompson Bridge access, so that the entering left turns at the Enota driveway are projected at only 6 vehicles in the a.m. peak hour and 5 in the p.m. peak hour. This should minimally impede westbound through flow on Enota. The eastbound right turns entering the site are also minimal, at 5 for the a.m. peak hour and 8 for the p.m. peak hour. This also should minimally impede flows on Enota. The Enota Avenue site access should be constructed with one entering and one exiting lane and the exiting approach should be controlled by stop sign and accompanying stop bar. The existing grade differential between the site and Enota Avenue at the location of the site access should be corrected when the site is developed.

## Appendix A

### Traffic Count Data and Volume Worksheets

# Thompson Bridge Road at Enota Avenue Convenience Store Traffic Impact Study

City of Gainesville, Georgia

April 2017

## Intersection: 1. Thompson Bridge Road at Walmart/Taco Bell

| Weekday A.M. Peak Hour                     | Northbound Thompson Bridge Road |      |      |     | Southbound Thompson Bridge Road |      |      |      | Eastbound Walmart Access |      |      |     | Westbound Taco Bell Access |      |      |     |
|--------------------------------------------|---------------------------------|------|------|-----|---------------------------------|------|------|------|--------------------------|------|------|-----|----------------------------|------|------|-----|
|                                            | L                               | T    | R    | Tot | L                               | T    | R    | Tot  | L                        | T    | R    | Tot | L                          | T    | R    | Tot |
| Counted Volumes (Thursday, March 30, 2017) | 52                              | 881  | 1    | 934 | 6                               | 1877 | 80   | 1963 | 38                       | 0    | 64   | 102 | 3                          | 1    | 4    | 8   |
| Total Annual Background Growth             | 6.1%                            | 6.1% | 6.1% |     | 6.1%                            | 6.1% | 6.1% |      | 6.1%                     | 6.1% | 6.1% |     | 6.1%                       | 6.1% | 6.1% |     |
| No-Build Volumes                           | 55                              | 935  | 1    | 991 | 6                               | 1991 | 85   | 2083 | 40                       | 0    | 68   | 108 | 3                          | 1    | 4    | 8   |
| Proposed Convenience Store New Trips       | 0                               | 4    | 0    | 4   | 0                               | 4    | 0    | 4    | 0                        | 0    | 0    | 0   | 0                          | 0    | 0    | 0   |
| Build Volumes                              | 55                              | 939  | 1    | 995 | 6                               | 1995 | 85   | 2087 | 40                       | 0    | 68   | 108 | 3                          | 1    | 4    | 8   |

| Weekday P.M. Peak Hour                     | Northbound Thompson Bridge Road |      |      |      | Southbound Thompson Bridge Road |      |      |      | Eastbound Walmart Access |      |      |     | Westbound Taco Bell Access |      |      |     |
|--------------------------------------------|---------------------------------|------|------|------|---------------------------------|------|------|------|--------------------------|------|------|-----|----------------------------|------|------|-----|
|                                            | L                               | T    | R    | Tot  | L                               | T    | R    | Tot  | L                        | T    | R    | Tot | L                          | T    | R    | Tot |
| Counted Volumes (Thursday, March 30, 2017) | 57                              | 1973 | 20   | 2050 | 13                              | 1101 | 54   | 1168 | 71                       | 3    | 37   | 111 | 14                         | 2    | 25   | 41  |
| Total Annual Background Growth             | 6.1%                            | 6.1% | 6.1% |      | 6.1%                            | 6.1% | 6.1% |      | 6.1%                     | 6.1% | 6.1% |     | 6.1%                       | 6.1% | 6.1% |     |
| No-Build Volumes                           | 60                              | 2093 | 21   | 2175 | 14                              | 1168 | 57   | 1239 | 75                       | 3    | 39   | 118 | 15                         | 2    | 27   | 44  |
| Proposed Convenience Store New Trips       | 0                               | 4    | 0    | 4    | 0                               | 4    | 0    | 4    | 0                        | 0    | 0    | 0   | 0                          | 0    | 0    | 0   |
| Build Volumes                              | 60                              | 2097 | 21   | 2179 | 14                              | 1172 | 57   | 1243 | 75                       | 3    | 39   | 118 | 15                         | 2    | 27   | 44  |

MARC R. ACAMPORA, PE, LLC

**Thompson Bridge Road at Enota Avenue Convenience Store Traffic Impact Study**  
City of Gainesville, Georgia

April 2017

**Intersection: 2. Thompson Bridge Road at Enota Avenue**

| Weekday A.M. Peak Hour                               | Northbound Thompson Bridge Road |            |           |            | Southbound Thompson Bridge Road |             |           |             | Eastbound Enota Avenue |           |           |            | Westbound Enota Avenue |           |            |            |
|------------------------------------------------------|---------------------------------|------------|-----------|------------|---------------------------------|-------------|-----------|-------------|------------------------|-----------|-----------|------------|------------------------|-----------|------------|------------|
|                                                      | L                               | T          | R         | Tot        | L                               | T           | R         | Tot         | L                      | T         | R         | Tot        | L                      | T         | R          | Tot        |
| <b>Counted Volumes (Thursday, February 16, 2017)</b> | 17                              | 734        | 26        | 777        | 313                             | 1604        | 32        | 1949        | 53                     | 51        | 29        | 133        | 45                     | 27        | 167        | 239        |
| Total Annual Background Growth                       | 6.1%                            | 6.1%       | 6.1%      |            | 6.1%                            | 6.1%        | 6.1%      |             | 6.1%                   | 6.1%      | 6.1%      |            | 6.1%                   | 6.1%      | 6.1%       |            |
| <b>No-Build Volumes</b>                              | <b>18</b>                       | <b>779</b> | <b>28</b> | <b>824</b> | <b>332</b>                      | <b>1702</b> | <b>34</b> | <b>2068</b> | <b>56</b>              | <b>54</b> | <b>31</b> | <b>141</b> | <b>48</b>              | <b>29</b> | <b>177</b> | <b>254</b> |
| Proposed Convenience Store New Trips                 | 0                               | 0          | 0         | 0          | 0                               | 4           | 0         | 4           | 4                      | 8         | 0         | 12         | 5                      | 4         | 0          | 9          |
| Proposed Convenience Store Pass-by Trips             | 0                               | 0          | 0         | 0          | 0                               | 0           | 0         | 0           | 12                     | 0         | 0         | 12         | 0                      | 0         | 0          | 0          |
| Total Convenience Store Trips                        | 0                               | 0          | 0         | 0          | 0                               | 4           | 0         | 4           | 16                     | 8         | 0         | 24         | 5                      | 4         | 0          | 9          |
| <b>Build Volumes</b>                                 | <b>18</b>                       | <b>779</b> | <b>28</b> | <b>824</b> | <b>332</b>                      | <b>1706</b> | <b>34</b> | <b>2072</b> | <b>72</b>              | <b>62</b> | <b>31</b> | <b>165</b> | <b>53</b>              | <b>33</b> | <b>177</b> | <b>263</b> |

| Weekday P.M. Peak Hour                               | Northbound Thompson Bridge Road |             |           |             | Southbound Thompson Bridge Road |             |           |             | Eastbound Enota Avenue |           |           |            | Westbound Enota Avenue |           |            |            |
|------------------------------------------------------|---------------------------------|-------------|-----------|-------------|---------------------------------|-------------|-----------|-------------|------------------------|-----------|-----------|------------|------------------------|-----------|------------|------------|
|                                                      | L                               | T           | R         | Tot         | L                               | T           | R         | Tot         | L                      | T         | R         | Tot        | L                      | T         | R          | Tot        |
| <b>Counted Volumes (Thursday, February 16, 2017)</b> | 17                              | 1573        | 36        | 1626        | 215                             | 942         | 26        | 1183        | 161                    | 82        | 13        | 256        | 55                     | 51        | 359        | 465        |
| Total Annual Background Growth                       | 6.1%                            | 6.1%        | 6.1%      |             | 6.1%                            | 6.1%        | 6.1%      |             | 6.1%                   | 6.1%      | 6.1%      |            | 6.1%                   | 6.1%      | 6.1%       |            |
| <b>No-Build Volumes</b>                              | <b>18</b>                       | <b>1669</b> | <b>38</b> | <b>1725</b> | <b>228</b>                      | <b>999</b>  | <b>28</b> | <b>1255</b> | <b>171</b>             | <b>87</b> | <b>14</b> | <b>272</b> | <b>58</b>              | <b>54</b> | <b>381</b> | <b>493</b> |
| Proposed Convenience Store New Trips                 | 0                               | 0           | 0         | 0           | 0                               | 4           | 0         | 4           | 4                      | 9         | 0         | 13         | 5                      | 4         | 0          | 9          |
| Proposed Convenience Store Pass-by Trips             | 0                               | 0           | 0         | 0           | 0                               | 0           | 0         | 0           | 27                     | 0         | 0         | 27         | 0                      | 0         | 0          | 0          |
| Total Convenience Store Trips                        | 0                               | 0           | 0         | 0           | 0                               | 4           | 0         | 4           | 31                     | 9         | 0         | 40         | 5                      | 4         | 0          | 9          |
| <b>Build Volumes</b>                                 | <b>18</b>                       | <b>1669</b> | <b>38</b> | <b>1725</b> | <b>228</b>                      | <b>1003</b> | <b>28</b> | <b>1259</b> | <b>202</b>             | <b>96</b> | <b>14</b> | <b>312</b> | <b>63</b>              | <b>58</b> | <b>381</b> | <b>502</b> |

**MARC R. ACAMPORA, PE, LLC**

# Thompson Bridge Road at Enota Avenue Convenience Store Traffic Impact Study

City of Gainesville, Georgia

April 2017

Intersection: 3. Enota Avenue at Riverside Drive

| Weekday A.M. Peak Hour                     | Northbound Riverside Drive |      |      |     | Southbound Riverside Drive |      |      |     | Eastbound Enota Avenue |      |      |     | Westbound Enota Avenue |      |      |     |
|--------------------------------------------|----------------------------|------|------|-----|----------------------------|------|------|-----|------------------------|------|------|-----|------------------------|------|------|-----|
|                                            | L                          | T    | R    | Tot | L                          | T    | R    | Tot | L                      | T    | R    | Tot | L                      | T    | R    | Tot |
| Counted Volumes (Thursday, March 30, 2017) | 9                          | 55   | 65   | 129 | 137                        | 122  | 16   | 275 | 9                      | 305  | 7    | 321 | 45                     | 200  | 40   | 285 |
| Total Annual Background Growth             | 6.1%                       | 6.1% | 6.1% |     | 6.1%                       | 6.1% | 6.1% |     | 6.1%                   | 6.1% | 6.1% |     | 6.1%                   | 6.1% | 6.1% |     |
| No-Build Volumes                           | 10                         | 58   | 69   | 137 | 145                        | 129  | 17   | 292 | 10                     | 324  | 7    | 341 | 48                     | 212  | 42   | 302 |
| Proposed Convenience Store New Trips       | 1                          | 0    | 0    | 1   | 0                          | 0    | 2    | 2   | 2                      | 5    | 1    | 8   | 0                      | 6    | 0    | 6   |
| Build Volumes                              | 11                         | 58   | 69   | 138 | 145                        | 129  | 19   | 294 | 12                     | 329  | 8    | 349 | 48                     | 218  | 42   | 308 |

| Weekday P.M. Peak Hour                     | Northbound Riverside Drive |      |      |     | Southbound Riverside Drive |      |      |     | Eastbound Enota Avenue |      |      |     | Westbound Enota Avenue |      |      |     |
|--------------------------------------------|----------------------------|------|------|-----|----------------------------|------|------|-----|------------------------|------|------|-----|------------------------|------|------|-----|
|                                            | L                          | T    | R    | Tot | L                          | T    | R    | Tot | L                      | T    | R    | Tot | L                      | T    | R    | Tot |
| Counted Volumes (Thursday, March 30, 2017) | 22                         | 342  | 37   | 401 | 59                         | 66   | 29   | 154 | 67                     | 306  | 10   | 383 | 26                     | 312  | 109  | 447 |
| Total Annual Background Growth             | 6.1%                       | 6.1% | 6.1% |     | 6.1%                       | 6.1% | 6.1% |     | 6.1%                   | 6.1% | 6.1% |     | 6.1%                   | 6.1% | 6.1% |     |
| No-Build Volumes                           | 23                         | 363  | 39   | 425 | 63                         | 70   | 31   | 163 | 71                     | 325  | 11   | 406 | 28                     | 331  | 116  | 474 |
| Proposed Convenience Store New Trips       | 1                          | 0    | 0    | 1   | 0                          | 0    | 2    | 2   | 2                      | 6    | 1    | 9   | 0                      | 6    | 0    | 6   |
| Build Volumes                              | 24                         | 363  | 39   | 426 | 63                         | 70   | 33   | 165 | 73                     | 331  | 12   | 415 | 28                     | 337  | 116  | 480 |

MARC R. ACAMPORA, PE, LLC

**Thompson Bridge Road at Enota Avenue Convenience Store Traffic Impact Study**  
City of Gainesville, Georgia

April 2017

**Intersection: 4. GA 11 Business at South Enota Avenue**

| Weekday A.M. Peak Hour                            | Northbound GA 11 Business |            |            |            | Southbound GA 11 Business |            |            |             | Eastbound South Enota Avenue |            |           |            | Westbound South Enota Avenue |            |           |            |
|---------------------------------------------------|---------------------------|------------|------------|------------|---------------------------|------------|------------|-------------|------------------------------|------------|-----------|------------|------------------------------|------------|-----------|------------|
|                                                   | L                         | T          | R          | Tot        | L                         | T          | R          | Tot         | L                            | T          | R         | Tot        | L                            | T          | R         | Tot        |
| <b>Counted Volumes (Thursday, March 30, 2017)</b> | 12                        | 448        | 114        | 574        | 245                       | 852        | 171        | 1268        | 272                          | 254        | 34        | 560        | 81                           | 127        | 86        | 294        |
| Total Annual Background Growth                    | 6.1%                      | 6.1%       | 6.1%       |            | 6.1%                      | 6.1%       | 6.1%       |             | 6.1%                         | 6.1%       | 6.1%      |            | 6.1%                         | 6.1%       | 6.1%      |            |
| <b>No-Build Volumes</b>                           | <b>13</b>                 | <b>475</b> | <b>121</b> | <b>609</b> | <b>260</b>                | <b>904</b> | <b>181</b> | <b>1345</b> | <b>289</b>                   | <b>269</b> | <b>36</b> | <b>594</b> | <b>86</b>                    | <b>135</b> | <b>91</b> | <b>312</b> |
| Proposed Convenience Store New Trips              | 1                         | 0          | 0          | 1          | 0                         | 0          | 2          | 2           | 2                            | 2          | 1         | 5          | 0                            | 3          | 0         | 3          |
| <b>Build Volumes</b>                              | <b>14</b>                 | <b>475</b> | <b>121</b> | <b>610</b> | <b>260</b>                | <b>904</b> | <b>183</b> | <b>1347</b> | <b>291</b>                   | <b>271</b> | <b>37</b> | <b>599</b> | <b>86</b>                    | <b>138</b> | <b>91</b> | <b>315</b> |

| Weekday P.M. Peak Hour                            | Northbound GA 11 Business |            |           |            | Southbound GA 11 Business |            |            |            | Eastbound South Enota Avenue |            |           |            | Westbound South Enota Avenue |            |            |            |
|---------------------------------------------------|---------------------------|------------|-----------|------------|---------------------------|------------|------------|------------|------------------------------|------------|-----------|------------|------------------------------|------------|------------|------------|
|                                                   | L                         | T          | R         | Tot        | L                         | T          | R          | Tot        | L                            | T          | R         | Tot        | L                            | T          | R          | Tot        |
| <b>Counted Volumes (Thursday, March 30, 2017)</b> | 17                        | 584        | 48        | 649        | 106                       | 579        | 250        | 935        | 231                          | 142        | 28        | 401        | 237                          | 341        | 354        | 932        |
| Total Annual Background Growth                    | 6.1%                      | 6.1%       | 6.1%      |            | 6.1%                      | 6.1%       | 6.1%       |            | 6.1%                         | 6.1%       | 6.1%      |            | 6.1%                         | 6.1%       | 6.1%       |            |
| <b>No-Build Volumes</b>                           | <b>18</b>                 | <b>620</b> | <b>51</b> | <b>689</b> | <b>112</b>                | <b>614</b> | <b>265</b> | <b>992</b> | <b>245</b>                   | <b>151</b> | <b>30</b> | <b>425</b> | <b>251</b>                   | <b>362</b> | <b>376</b> | <b>989</b> |
| Proposed Convenience Store New Trips              | 1                         | 0          | 0         | 1          | 0                         | 0          | 2          | 2          | 2                            | 2          | 1         | 5          | 0                            | 3          | 0          | 3          |
| <b>Build Volumes</b>                              | <b>19</b>                 | <b>620</b> | <b>51</b> | <b>690</b> | <b>112</b>                | <b>614</b> | <b>267</b> | <b>994</b> | <b>247</b>                   | <b>153</b> | <b>31</b> | <b>430</b> | <b>251</b>                   | <b>365</b> | <b>376</b> | <b>992</b> |

**MARC R. ACAMPORA, PE, LLC**

**Thompson Bridge Road at Enota Avenue Convenience Store Traffic Impact Study**  
City of Gainesville, Georgia

April 2017

**Intersection: 5. GA 60 at GA 11 Business**

| Weekday A.M. Peak Hour                                | Northbound GA 60 |            |            |             | Southbound GA 60 |             |            |             | Eastbound Holly Drive |          |           |           | Westbound GA 11 Business |            |          |            |
|-------------------------------------------------------|------------------|------------|------------|-------------|------------------|-------------|------------|-------------|-----------------------|----------|-----------|-----------|--------------------------|------------|----------|------------|
|                                                       | L                | T          | R          | Tot         | L                | T           | R          | Tot         | L                     | T        | R         | Tot       | L                        | T          | R        | Tot        |
| <b>Counted Volumes (Wednesday, February 22, 2017)</b> | 19               | 683        | 296        | 998         | 0                | 1391        | 132        | 1523        | 0                     | 0        | 53        | 53        | 461                      | 189        | 0        | 650        |
| Total Annual Background Growth                        | 6.1%             | 6.1%       | 6.1%       |             | 6.1%             | 6.1%        | 6.1%       |             | 6.1%                  | 6.1%     | 6.1%      |           | 6.1%                     | 6.1%       | 6.1%     |            |
| <b>No-Build Volumes</b>                               | <b>20</b>        | <b>725</b> | <b>314</b> | <b>1059</b> | <b>0</b>         | <b>1476</b> | <b>140</b> | <b>1616</b> | <b>0</b>              | <b>0</b> | <b>56</b> | <b>56</b> | <b>489</b>               | <b>201</b> | <b>0</b> | <b>690</b> |
| Proposed Convenience Store New Trips                  | 0                | 9          | 0          | 9           | 0                | 9           | 0          | 9           | 0                     | 0        | 0         | 0         | 0                        | 0          | 0        | 0          |
| <b>Build Volumes</b>                                  | <b>20</b>        | <b>734</b> | <b>314</b> | <b>1068</b> | <b>0</b>         | <b>1485</b> | <b>140</b> | <b>1625</b> | <b>0</b>              | <b>0</b> | <b>56</b> | <b>56</b> | <b>489</b>               | <b>201</b> | <b>0</b> | <b>690</b> |

| Weekday P.M. Peak Hour                                | Northbound GA 60 |             |            |             | Southbound GA 60 |            |            |             | Eastbound Holly Drive |          |           |           | Westbound GA 11 Business |            |          |            |
|-------------------------------------------------------|------------------|-------------|------------|-------------|------------------|------------|------------|-------------|-----------------------|----------|-----------|-----------|--------------------------|------------|----------|------------|
|                                                       | L                | T           | R          | Tot         | L                | T          | R          | Tot         | L                     | T        | R         | Tot       | L                        | T          | R        | Tot        |
| <b>Counted Volumes (Wednesday, February 22, 2017)</b> | 46               | 1412        | 653        | 2111        | 0                | 812        | 125        | 937         | 0                     | 0        | 35        | 35        | 387                      | 218        | 0        | 605        |
| Total Annual Background Growth                        | 6.1%             | 6.1%        | 6.1%       |             | 6.1%             | 6.1%       | 6.1%       |             | 6.1%                  | 6.1%     | 6.1%      |           | 6.1%                     | 6.1%       | 6.1%     |            |
| <b>No-Build Volumes</b>                               | <b>49</b>        | <b>1498</b> | <b>693</b> | <b>2240</b> | <b>0</b>         | <b>862</b> | <b>133</b> | <b>994</b>  | <b>0</b>              | <b>0</b> | <b>37</b> | <b>37</b> | <b>411</b>               | <b>231</b> | <b>0</b> | <b>642</b> |
| Proposed Convenience Store New Trips                  | 0                | 10          | 0          | 10          | 0                | 10         | 0          | 10          | 0                     | 0        | 0         | 0         | 0                        | 0          | 0        | 0          |
| <b>Build Volumes</b>                                  | <b>49</b>        | <b>1508</b> | <b>693</b> | <b>2250</b> | <b>0</b>         | <b>872</b> | <b>133</b> | <b>1004</b> | <b>0</b>              | <b>0</b> | <b>37</b> | <b>37</b> | <b>411</b>               | <b>231</b> | <b>0</b> | <b>642</b> |

**MARC R. ACAMPORA, PE, LLC**



**Thompson Bridge Road at Enota Avenue Convenience Store Traffic Impact Study**  
City of Gainesville, Georgia

April 2017

**Intersection: 6. GA 60 at Ridgewood Avenue**

| Weekday A.M. Peak Hour                                | Northbound GA 60 |            |           |            | Southbound GA 60 |             |           |             | Eastbound Ridgewood Avenue |          |           |            | Westbound Driveway |          |          |           |
|-------------------------------------------------------|------------------|------------|-----------|------------|------------------|-------------|-----------|-------------|----------------------------|----------|-----------|------------|--------------------|----------|----------|-----------|
|                                                       | L                | T          | R         | Tot        | L                | T           | R         | Tot         | L                          | T        | R         | Tot        | L                  | T        | R        | Tot       |
| <b>Counted Volumes (Wednesday, February 22, 2017)</b> | 14               | 878        | 11        | 903        | 4                | 1798        | 63        | 1865        | 131                        | 5        | 22        | 158        | 6                  | 6        | 2        | 14        |
| Total Annual Background Growth                        | 6.1%             | 6.1%       | 6.1%      |            | 6.1%             | 6.1%        | 6.1%      |             | 6.1%                       | 6.1%     | 6.1%      |            | 6.1%               | 6.1%     | 6.1%     |           |
| <b>No-Build Volumes</b>                               | <b>15</b>        | <b>932</b> | <b>12</b> | <b>958</b> | <b>4</b>         | <b>1908</b> | <b>67</b> | <b>1979</b> | <b>139</b>                 | <b>5</b> | <b>23</b> | <b>168</b> | <b>6</b>           | <b>6</b> | <b>2</b> | <b>15</b> |
| Proposed Convenience Store New Trips                  | 0                | 7          | 0         | 7          | 0                | 7           | 2         | 9           | 2                          | 0        | 0         | 2          | 0                  | 0        | 0        | 0         |
| <b>Build Volumes</b>                                  | <b>15</b>        | <b>939</b> | <b>12</b> | <b>965</b> | <b>4</b>         | <b>1915</b> | <b>69</b> | <b>1988</b> | <b>141</b>                 | <b>5</b> | <b>23</b> | <b>170</b> | <b>6</b>           | <b>6</b> | <b>2</b> | <b>15</b> |

| Weekday P.M. Peak Hour                                | Northbound GA 60 |             |           |             | Southbound GA 60 |             |           |             | Eastbound Ridgewood Avenue |          |           |            | Westbound Driveway |           |          |           |
|-------------------------------------------------------|------------------|-------------|-----------|-------------|------------------|-------------|-----------|-------------|----------------------------|----------|-----------|------------|--------------------|-----------|----------|-----------|
|                                                       | L                | T           | R         | Tot         | L                | T           | R         | Tot         | L                          | T        | R         | Tot        | L                  | T         | R        | Tot       |
| <b>Counted Volumes (Wednesday, February 22, 2017)</b> | 23               | 1849        | 10        | 1882        | 0                | 1097        | 73        | 1170        | 252                        | 8        | 20        | 280        | 11                 | 14        | 5        | 30        |
| Total Annual Background Growth                        | 6.1%             | 6.1%        | 6.1%      |             | 6.1%             | 6.1%        | 6.1%      |             | 6.1%                       | 6.1%     | 6.1%      |            | 6.1%               | 6.1%      | 6.1%     |           |
| <b>No-Build Volumes</b>                               | <b>24</b>        | <b>1962</b> | <b>11</b> | <b>1997</b> | <b>0</b>         | <b>1164</b> | <b>77</b> | <b>1241</b> | <b>267</b>                 | <b>8</b> | <b>21</b> | <b>297</b> | <b>12</b>          | <b>15</b> | <b>5</b> | <b>32</b> |
| Proposed Convenience Store New Trips                  | 0                | 7           | 0         | 7           | 0                | 7           | 3         | 10          | 3                          | 0        | 0         | 3          | 0                  | 0         | 0        | 0         |
| <b>Build Volumes</b>                                  | <b>24</b>        | <b>1969</b> | <b>11</b> | <b>2004</b> | <b>0</b>         | <b>1171</b> | <b>80</b> | <b>1251</b> | <b>270</b>                 | <b>8</b> | <b>21</b> | <b>300</b> | <b>12</b>          | <b>15</b> | <b>5</b> | <b>32</b> |

**MARC R. ACAMPORA, PE, LLC**

**Thompson Bridge Road at Enota Avenue Convenience Store Traffic Impact Study**  
City of Gainesville, Georgia

April 2017

**Intersection: 7. Thompson Bridge Road at Site Access**

| Weekday A.M. Peak Hour                        | Northbound Thompson Bridge Road |            |            | Southbound Thompson Bridge Road |             |             | Eastbound Site Access |           |           |  |
|-----------------------------------------------|---------------------------------|------------|------------|---------------------------------|-------------|-------------|-----------------------|-----------|-----------|--|
|                                               | L                               | T          | Tot        | T                               | R           | Tot         | L                     | R         | Tot       |  |
| Counted Volumes (Thursday, February 16, 2017) |                                 | 777        | 777        |                                 | 1678        | 1678        |                       |           |           |  |
| Total Annual Background Growth                |                                 | 6.1%       |            |                                 | 6.1%        |             |                       |           |           |  |
| <b>No-Build Volumes</b>                       |                                 | <b>824</b> | <b>824</b> |                                 | <b>1780</b> | <b>1780</b> |                       |           |           |  |
| Proposed Convenience Store New Trips          | 9                               | 0          | 9          | 0                               | 9           | 9           | 0                     | 9         | 9         |  |
| Proposed Convenience Store Pass-by Trips      | 12                              | -12        | 0          | -26                             | 26          | 0           | 0                     | 26        | 26        |  |
| Total Convenience Store Trips                 | 21                              | -12        | 9          | -26                             | 35          | 9           | 0                     | 35        | 35        |  |
| <b>Build Volumes</b>                          | <b>21</b>                       | <b>812</b> | <b>833</b> | <b>1754</b>                     | <b>35</b>   | <b>1789</b> | <b>0</b>              | <b>35</b> | <b>35</b> |  |

| Weekday P.M. Peak Hour                        | Northbound Thompson Bridge Road |             |             | Southbound Thompson Bridge Road |             |             | Eastbound Site Access |           |           |  |
|-----------------------------------------------|---------------------------------|-------------|-------------|---------------------------------|-------------|-------------|-----------------------|-----------|-----------|--|
|                                               | L                               | T           | Tot         | T                               | R           | Tot         | L                     | R         | Tot       |  |
| Counted Volumes (Thursday, February 16, 2017) |                                 | 1626        | 1626        |                                 | 1010        | 1010        |                       |           |           |  |
| Total Annual Background Growth                |                                 | 6.1%        |             |                                 | 6.1%        |             |                       |           |           |  |
| <b>No-Build Volumes</b>                       |                                 | <b>1725</b> | <b>1725</b> |                                 | <b>1072</b> | <b>1072</b> |                       |           |           |  |
| Proposed Convenience Store New Trips          | 10                              | 0           | 10          | 0                               | 9           | 9           | 0                     | 10        | 10        |  |
| Proposed Convenience Store Pass-by Trips      | 27                              | -27         | 0           | -17                             | 17          | 0           | 0                     | 18        | 18        |  |
| Total Convenience Store Trips                 | 37                              | -27         | 10          | -17                             | 26          | 9           | 0                     | 28        | 28        |  |
| <b>Build Volumes</b>                          | <b>37</b>                       | <b>1698</b> | <b>1735</b> | <b>1055</b>                     | <b>26</b>   | <b>1081</b> | <b>0</b>              | <b>28</b> | <b>28</b> |  |

**MARC R. ACAMPORA, PE, LLC**

**Thompson Bridge Road at Enota Avenue Convenience Store Traffic Impact Study**  
City of Gainesville, Georgia

April 2017

**Intersection: 8. Enota Avenue at Site Access**

| Weekday A.M. Peak Hour                               | Northbound Site Access |           |           |  | Eastbound Enota Avenue |          |            | Westbound Enota Avenue |           |           |
|------------------------------------------------------|------------------------|-----------|-----------|--|------------------------|----------|------------|------------------------|-----------|-----------|
|                                                      | L                      | R         | Tot       |  | T                      | R        | Tot        | L                      | T         | Tot       |
| <b>Counted Volumes (Thursday, February 16, 2017)</b> |                        |           |           |  | 133                    |          | 133        |                        | 76        | 76        |
| Total Annual Background Growth                       |                        |           |           |  | 6.1%                   |          |            |                        | 6.1%      |           |
| <b>No-Build Volumes</b>                              |                        |           |           |  | <b>141</b>             |          | <b>141</b> |                        | <b>81</b> | <b>81</b> |
| Proposed Convenience Store New Trips                 | 3                      | 12        | 15        |  | 0                      | 3        | 3          | 4                      | 0         | 4         |
| Proposed Convenience Store Pass-by Trips             | 2                      | 14        | 16        |  | -2                     | 2        | 0          | 2                      | -2        | 0         |
| Total Convenience Store Trips                        | 5                      | 26        | 31        |  | -2                     | 5        | 3          | 6                      | -2        | 4         |
| <b>Build Volumes</b>                                 | <b>5</b>               | <b>26</b> | <b>31</b> |  | <b>139</b>             | <b>5</b> | <b>144</b> | <b>6</b>               | <b>79</b> | <b>85</b> |

| Weekday P.M. Peak Hour                               | Northbound Site Access |           |           |  | Eastbound Enota Avenue |          |            | Westbound Enota Avenue |            |            |
|------------------------------------------------------|------------------------|-----------|-----------|--|------------------------|----------|------------|------------------------|------------|------------|
|                                                      | L                      | R         | Tot       |  | T                      | R        | Tot        | L                      | T          | Tot        |
| <b>Counted Volumes (Thursday, February 16, 2017)</b> |                        |           |           |  | 256                    |          | 256        |                        | 94         | 94         |
| Total Annual Background Growth                       |                        |           |           |  | 6.1%                   |          |            |                        | 6.1%       |            |
| <b>No-Build Volumes</b>                              |                        |           |           |  | <b>272</b>             |          | <b>272</b> |                        | <b>100</b> | <b>100</b> |
| Proposed Convenience Store New Trips                 | 3                      | 13        | 16        |  | 0                      | 3        | 3          | 4                      | 0          | 4          |
| Proposed Convenience Store Pass-by Trips             | 1                      | 32        | 33        |  | -5                     | 5        | 0          | 1                      | -1         | 0          |
| Total Convenience Store Trips                        | 4                      | 45        | 49        |  | -5                     | 8        | 3          | 5                      | -1         | 4          |
| <b>Build Volumes</b>                                 | <b>4</b>               | <b>45</b> | <b>49</b> |  | <b>267</b>             | <b>8</b> | <b>275</b> | <b>5</b>               | <b>99</b>  | <b>104</b> |

**MARC R. ACAMPORA, PE, LLC**

# Reliable Traffic Data Services, LLC

Tel: (770) 578-8158 | Fax: (770) 578-8159  
info@reliabletraffic.org | www.reliabletraffic.org

TMC Data  
Thompson Bridge Rd @ Walmart Drwy/  
Taco Bell Drwy, Gainesville, GA  
7-9am I 4-6pm

File Name : 40240001  
Site Code : 40240001  
Start Date : 3/30/2017  
Page No : 1

## Groups Printed- Cars, Buses and Trucks

|               | Thompson Bridge Rd Northbound |      |       |      |            | Thompson Bridge Rd Southbound |      |       |      |            | Walmart Drwy Eastbound |      |       |      |            | Taco Bell Drwy Westbound |      |       |      |            |            |
|---------------|-------------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|------------------------|------|-------|------|------------|--------------------------|------|-------|------|------------|------------|
| Start Time    | Left                          | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Left                   | Thru | Right | Peds | App. Total | Left                     | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 4                             | 150  | 0     | 0    | 154        | 0                             | 328  | 12    | 0    | 340        | 4                      | 0    | 13    | 0    | 17         | 0                        | 0    | 0     | 0    | 0          | 511        |
| 07:15 AM      | 9                             | 196  | 0     | 0    | 205        | 0                             | 435  | 18    | 0    | 453        | 7                      | 0    | 16    | 0    | 23         | 0                        | 0    | 0     | 0    | 0          | 681        |
| 07:30 AM      | 9                             | 212  | 0     | 0    | 221        | 1                             | 493  | 20    | 0    | 514        | 6                      | 0    | 14    | 0    | 20         | 0                        | 0    | 0     | 0    | 0          | 755        |
| 07:45 AM      | 17                            | 232  | 0     | 0    | 249        | 0                             | 524  | 21    | 0    | 545        | 11                     | 0    | 17    | 0    | 28         | 2                        | 1    | 0     | 0    | 3          | 825        |
| Total         | 39                            | 790  | 0     | 0    | 829        | 1                             | 1780 | 71    | 0    | 1852       | 28                     | 0    | 60    | 0    | 88         | 2                        | 1    | 0     | 0    | 3          | 2772       |
| 08:00 AM      | 14                            | 233  | 1     | 0    | 248        | 2                             | 429  | 22    | 0    | 453        | 10                     | 0    | 20    | 0    | 30         | 0                        | 0    | 2     | 0    | 2          | 733        |
| 08:15 AM      | 12                            | 204  | 0     | 0    | 216        | 3                             | 431  | 17    | 0    | 451        | 11                     | 0    | 13    | 0    | 24         | 1                        | 0    | 2     | 0    | 3          | 694        |
| 08:30 AM      | 8                             | 216  | 1     | 0    | 225        | 1                             | 397  | 14    | 0    | 412        | 9                      | 0    | 13    | 0    | 22         | 0                        | 1    | 0     | 0    | 1          | 660        |
| 08:45 AM      | 12                            | 209  | 0     | 0    | 221        | 0                             | 358  | 13    | 0    | 371        | 8                      | 0    | 21    | 0    | 29         | 0                        | 0    | 3     | 0    | 3          | 624        |
| Total         | 46                            | 862  | 2     | 0    | 910        | 6                             | 1615 | 66    | 0    | 1687       | 38                     | 0    | 67    | 0    | 105        | 1                        | 1    | 7     | 0    | 9          | 2711       |
| *** BREAK *** |                               |      |       |      |            |                               |      |       |      |            |                        |      |       |      |            |                          |      |       |      |            |            |
| 04:00 PM      | 17                            | 355  | 2     | 0    | 374        | 2                             | 252  | 23    | 0    | 277        | 16                     | 0    | 17    | 0    | 33         | 1                        | 0    | 2     | 0    | 3          | 687        |
| 04:15 PM      | 17                            | 400  | 8     | 0    | 425        | 3                             | 264  | 16    | 0    | 283        | 19                     | 1    | 16    | 0    | 36         | 6                        | 0    | 5     | 0    | 11         | 755        |
| 04:30 PM      | 16                            | 438  | 10    | 0    | 464        | 4                             | 253  | 16    | 0    | 273        | 11                     | 2    | 14    | 0    | 27         | 6                        | 2    | 6     | 0    | 14         | 778        |
| 04:45 PM      | 19                            | 465  | 5     | 0    | 489        | 3                             | 251  | 21    | 0    | 275        | 18                     | 2    | 16    | 0    | 36         | 3                        | 1    | 5     | 0    | 9          | 809        |
| Total         | 69                            | 1658 | 25    | 0    | 1752       | 12                            | 1020 | 76    | 0    | 1108       | 64                     | 5    | 63    | 0    | 132        | 16                       | 3    | 18    | 0    | 37         | 3029       |
| 05:00 PM      | 17                            | 524  | 9     | 0    | 550        | 3                             | 278  | 16    | 0    | 297        | 22                     | 0    | 12    | 0    | 34         | 7                        | 1    | 12    | 0    | 20         | 901        |
| 05:15 PM      | 10                            | 508  | 4     | 0    | 522        | 5                             | 290  | 10    | 0    | 305        | 26                     | 0    | 8     | 0    | 34         | 4                        | 0    | 6     | 0    | 10         | 871        |
| 05:30 PM      | 11                            | 476  | 2     | 0    | 489        | 2                             | 282  | 7     | 0    | 291        | 5                      | 1    | 1     | 0    | 7          | 0                        | 0    | 2     | 0    | 2          | 789        |
| 05:45 PM      | 1                             | 448  | 2     | 0    | 451        | 0                             | 301  | 3     | 0    | 304        | 2                      | 0    | 6     | 0    | 8          | 0                        | 0    | 2     | 0    | 2          | 765        |
| Total         | 39                            | 1956 | 17    | 0    | 2012       | 10                            | 1151 | 36    | 0    | 1197       | 55                     | 1    | 27    | 0    | 83         | 11                       | 1    | 22    | 0    | 34         | 3326       |
| Grand Total   | 193                           | 5266 | 44    | 0    | 5503       | 29                            | 5566 | 249   | 0    | 5844       | 185                    | 6    | 217   | 0    | 408        | 30                       | 6    | 47    | 0    | 83         | 11838      |
| Apprch %      | 3.5                           | 95.7 | 0.8   | 0    |            | 0.5                           | 95.2 | 4.3   | 0    |            | 45.3                   | 1.5  | 53.2  | 0    |            | 36.1                     | 7.2  | 56.6  | 0    |            |            |
| Total %       | 1.6                           | 44.5 | 0.4   | 0    | 46.5       | 0.2                           | 47   | 2.1   | 0    | 49.4       | 1.6                    | 0.1  | 1.8   | 0    | 3.4        | 0.3                      | 0.1  | 0.4   | 0    | 0.7        |            |

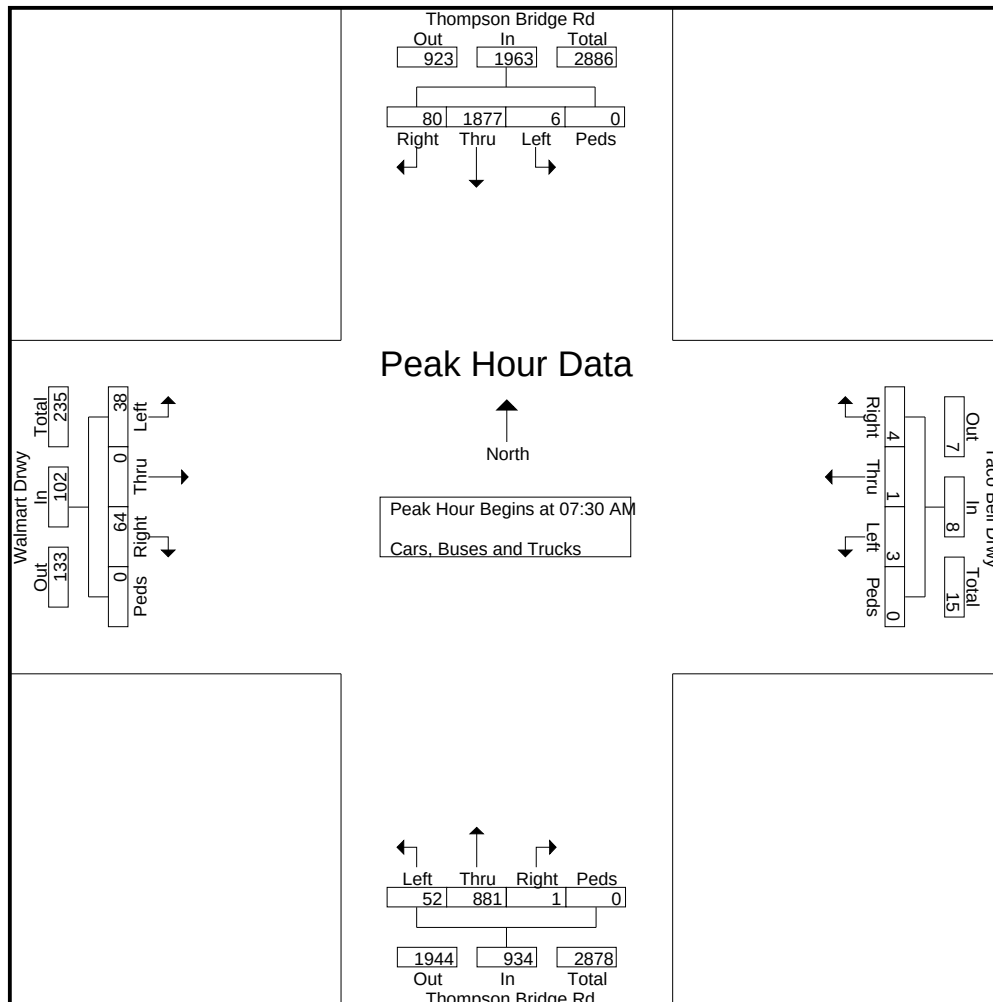
# Reliable Traffic Data Services, LLC

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TMC Data  
Thompson Bridge Rd @ Walmart Drwy/  
Taco Bell Drwy, Gainesville, GA  
7-9am I 4-6pm

File Name : 40240001  
Site Code : 40240001  
Start Date : 3/30/2017  
Page No : 2

|                                                            | Thompson Bridge Rd Northbound |      |       |      |            | Thompson Bridge Rd Southbound |      |       |      |            | Walmart Drwy Eastbound |      |       |      |            | Taco Bell Drwy Westbound |      |       |      |            |            |
|------------------------------------------------------------|-------------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|------------------------|------|-------|------|------------|--------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                          | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Left                   | Thru | Right | Peds | App. Total | Left                     | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                               |      |       |      |            |                               |      |       |      |            |                        |      |       |      |            |                          |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                               |      |       |      |            |                               |      |       |      |            |                        |      |       |      |            |                          |      |       |      |            |            |
| 07:30 AM                                                   | 9                             | 212  | 0     | 0    | 221        | 1                             | 493  | 20    | 0    | 514        | 6                      | 0    | 14    | 0    | 20         | 0                        | 0    | 0     | 0    | 0          | 755        |
| 07:45 AM                                                   | 17                            | 232  | 0     | 0    | 249        | 0                             | 524  | 21    | 0    | 545        | 11                     | 0    | 17    | 0    | 28         | 2                        | 1    | 0     | 0    | 3          | 825        |
| 08:00 AM                                                   | 14                            | 233  | 1     | 0    | 248        | 2                             | 429  | 22    | 0    | 453        | 10                     | 0    | 20    | 0    | 30         | 0                        | 0    | 2     | 0    | 2          | 733        |
| 08:15 AM                                                   | 12                            | 204  | 0     | 0    | 216        | 3                             | 431  | 17    | 0    | 451        | 11                     | 0    | 13    | 0    | 24         | 1                        | 0    | 2     | 0    | 3          | 694        |
| Total Volume                                               | 52                            | 881  | 1     | 0    | 934        | 6                             | 1877 | 80    | 0    | 1963       | 38                     | 0    | 64    | 0    | 102        | 3                        | 1    | 4     | 0    | 8          | 3007       |
| % App. Total                                               | 5.6                           | 94.3 | 0.1   | 0    |            | 0.3                           | 95.6 | 4.1   | 0    |            | 37.3                   | 0    | 62.7  | 0    |            | 37.5                     | 12.5 | 50    | 0    |            |            |
| PHF                                                        | .765                          | .945 | .250  | .000 | .938       | .500                          | .896 | .909  | .000 | .900       | .864                   | .000 | .800  | .000 | .850       | .375                     | .250 | .500  | .000 | .667       | .911       |



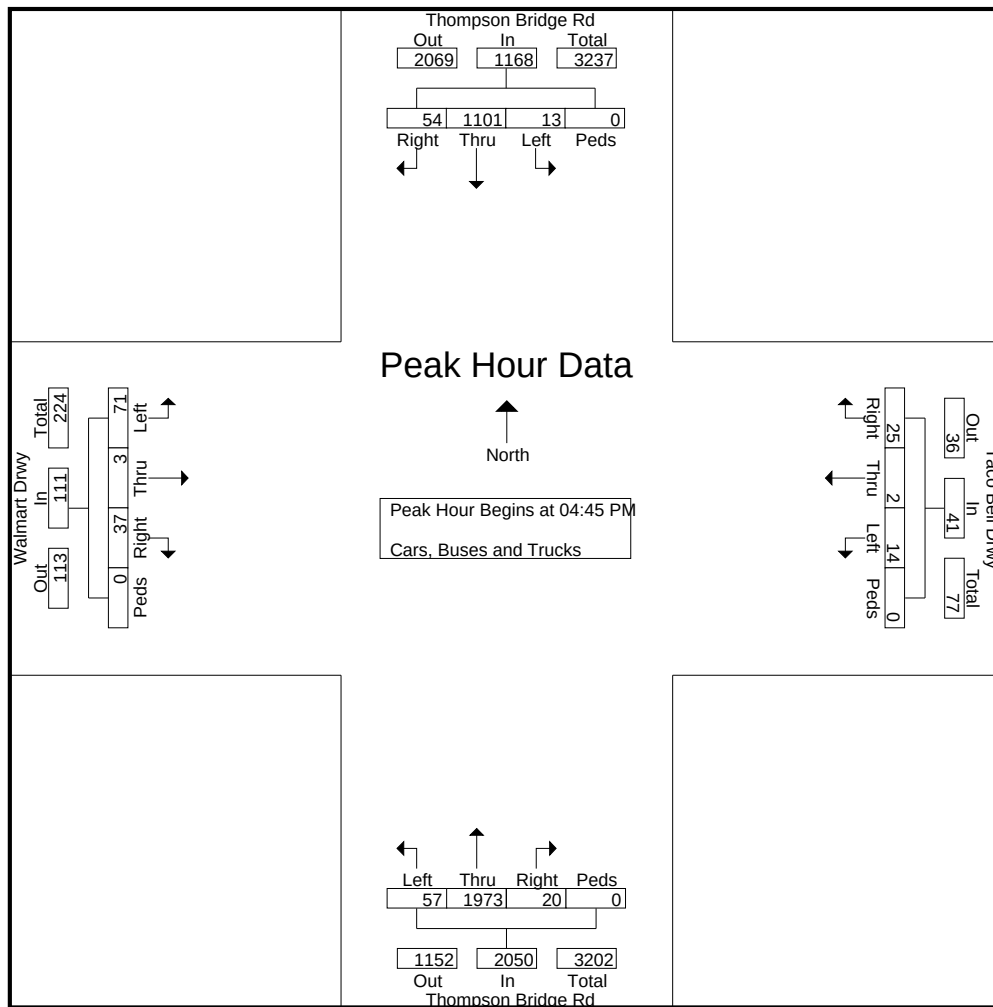
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TMC Data  
Thompson Bridge Rd @ Walmart Drwy/  
Taco Bell Drwy, Gainesville, GA  
7-9am I 4-6pm

File Name : 40240001  
Site Code : 40240001  
Start Date : 3/30/2017  
Page No : 3

|                                                            | Thompson Bridge Rd Northbound |      |       |      |            | Thompson Bridge Rd Southbound |      |       |      |            | Walmart Drwy Eastbound |      |       |      |            | Taco Bell Drwy Westbound |      |       |      |            |            |
|------------------------------------------------------------|-------------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|------------------------|------|-------|------|------------|--------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                          | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Left                   | Thru | Right | Peds | App. Total | Left                     | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                               |      |       |      |            |                               |      |       |      |            |                        |      |       |      |            |                          |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 04:45 PM       |                               |      |       |      |            |                               |      |       |      |            |                        |      |       |      |            |                          |      |       |      |            |            |
| 04:45 PM                                                   | 19                            | 465  | 5     | 0    | 489        | 21                            | 0    | 275   | 18   | 2          | 16                     | 0    | 36    | 3    | 1          | 5                        | 0    | 9     | 809  |            |            |
| 05:00 PM                                                   | 17                            | 524  | 9     | 0    | 550        | 3                             | 278  | 16    | 0    | 297        | 22                     | 0    | 12    | 0    | 34         | 7                        | 1    | 12    | 0    | 20         | 901        |
| 05:15 PM                                                   | 10                            | 508  | 4     | 0    | 522        | 5                             | 290  | 10    | 0    | 305        | 26                     | 0    | 8     | 0    | 34         | 4                        | 0    | 6     | 0    | 10         | 871        |
| 05:30 PM                                                   | 11                            | 476  | 2     | 0    | 489        | 2                             | 282  | 7     | 0    | 291        | 5                      | 1    | 1     | 0    | 7          | 0                        | 0    | 2     | 0    | 2          | 789        |
| Total Volume                                               | 57                            | 1973 | 20    | 0    | 2050       | 13                            | 1101 | 54    | 0    | 1168       | 71                     | 3    | 37    | 0    | 111        | 14                       | 2    | 25    | 0    | 41         | 3370       |
| % App. Total                                               | 2.8                           | 96.2 | 1     | 0    |            | 1.1                           | 94.3 | 4.6   | 0    |            | 64                     | 2.7  | 33.3  | 0    |            | 34.1                     | 4.9  | 61    | 0    |            |            |
| PHF                                                        | .750                          | .941 | .556  | .000 | .932       | .650                          | .949 | .643  | .000 | .957       | .683                   | .375 | .578  | .000 | .771       | .500                     | .500 | .521  | .000 | .513       | .935       |



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TMC Data  
Thompson Bridge Rd @ Enota Ave  
Gainesville, GA  
7-9am I 4-6pm

File Name : 39980001  
Site Code : 39980001  
Start Date : 2/16/2017  
Page No : 1

## Groups Printed- Cars, Buses and Trucks

|               | Thompson Bridge Rd Northbound |      |       |      |            | Thompson Bridge Rd Southbound |      |       |      |            | Enota Ave Eastbound |      |       |      |            | Enota Ave Westbound |      |       |      |            |            |
|---------------|-------------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|---------------------|------|-------|------|------------|---------------------|------|-------|------|------------|------------|
| Start Time    | Left                          | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Left                | Thru | Right | Peds | App. Total | Left                | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 2                             | 125  | 4     | 0    | 131        | 51                            | 281  | 2     | 0    | 334        | 6                   | 7    | 6     | 0    | 19         | 4                   | 0    | 28    | 0    | 32         | 516        |
| 07:15 AM      | 0                             | 163  | 7     | 0    | 170        | 71                            | 372  | 4     | 0    | 447        | 8                   | 17   | 4     | 0    | 29         | 7                   | 6    | 33    | 0    | 46         | 692        |
| 07:30 AM      | 6                             | 177  | 7     | 0    | 190        | 83                            | 414  | 9     | 0    | 506        | 13                  | 12   | 6     | 0    | 31         | 18                  | 7    | 34    | 0    | 59         | 786        |
| 07:45 AM      | 3                             | 193  | 3     | 0    | 199        | 78                            | 455  | 8     | 0    | 541        | 16                  | 10   | 9     | 0    | 35         | 5                   | 3    | 47    | 0    | 55         | 830        |
| Total         | 11                            | 658  | 21    | 0    | 690        | 283                           | 1522 | 23    | 0    | 1828       | 43                  | 46   | 25    | 0    | 114        | 34                  | 16   | 142   | 0    | 192        | 2824       |
| 08:00 AM      | 6                             | 194  | 7     | 0    | 207        | 72                            | 367  | 9     | 0    | 448        | 12                  | 17   | 6     | 0    | 35         | 14                  | 6    | 38    | 0    | 58         | 748        |
| 08:15 AM      | 2                             | 170  | 9     | 0    | 181        | 80                            | 368  | 6     | 0    | 454        | 12                  | 12   | 8     | 0    | 32         | 8                   | 11   | 48    | 0    | 67         | 734        |
| 08:30 AM      | 6                             | 189  | 6     | 0    | 201        | 58                            | 339  | 3     | 0    | 400        | 12                  | 7    | 8     | 0    | 27         | 14                  | 6    | 37    | 0    | 57         | 685        |
| 08:45 AM      | 4                             | 174  | 3     | 0    | 181        | 56                            | 299  | 5     | 0    | 360        | 12                  | 10   | 1     | 0    | 23         | 10                  | 6    | 29    | 0    | 45         | 609        |
| Total         | 18                            | 727  | 25    | 0    | 770        | 266                           | 1373 | 23    | 0    | 1662       | 48                  | 46   | 23    | 0    | 117        | 46                  | 29   | 152   | 0    | 227        | 2776       |
| *** BREAK *** |                               |      |       |      |            |                               |      |       |      |            |                     |      |       |      |            |                     |      |       |      |            |            |
| 04:00 PM      | 4                             | 284  | 8     | 0    | 296        | 58                            | 219  | 6     | 0    | 283        | 42                  | 18   | 7     | 0    | 67         | 10                  | 19   | 75    | 0    | 104        | 750        |
| 04:15 PM      | 5                             | 320  | 18    | 0    | 343        | 47                            | 241  | 4     | 0    | 292        | 33                  | 17   | 5     | 0    | 55         | 14                  | 9    | 80    | 0    | 103        | 793        |
| 04:30 PM      | 3                             | 350  | 9     | 0    | 362        | 52                            | 220  | 8     | 0    | 280        | 17                  | 21   | 1     | 0    | 39         | 8                   | 10   | 84    | 0    | 102        | 783        |
| 04:45 PM      | 2                             | 372  | 9     | 0    | 383        | 45                            | 218  | 5     | 0    | 268        | 34                  | 24   | 2     | 0    | 60         | 14                  | 17   | 92    | 0    | 123        | 834        |
| Total         | 14                            | 1326 | 44    | 0    | 1384       | 202                           | 898  | 23    | 0    | 1123       | 126                 | 80   | 15    | 0    | 221        | 46                  | 55   | 331   | 0    | 432        | 3160       |
| 05:00 PM      | 6                             | 419  | 14    | 0    | 439        | 47                            | 227  | 9     | 0    | 283        | 38                  | 13   | 4     | 0    | 55         | 14                  | 10   | 66    | 0    | 90         | 867        |
| 05:15 PM      | 3                             | 401  | 3     | 0    | 407        | 65                            | 252  | 4     | 0    | 321        | 50                  | 23   | 3     | 0    | 76         | 13                  | 14   | 102   | 0    | 129        | 933        |
| 05:30 PM      | 6                             | 381  | 10    | 0    | 397        | 58                            | 245  | 8     | 0    | 311        | 39                  | 22   | 4     | 0    | 65         | 14                  | 10   | 99    | 0    | 123        | 896        |
| 05:45 PM      | 5                             | 339  | 15    | 0    | 359        | 47                            | 262  | 7     | 0    | 316        | 32                  | 19   | 3     | 0    | 54         | 11                  | 13   | 78    | 0    | 102        | 831        |
| Total         | 20                            | 1540 | 42    | 0    | 1602       | 217                           | 986  | 28    | 0    | 1231       | 159                 | 77   | 14    | 0    | 250        | 52                  | 47   | 345   | 0    | 444        | 3527       |
| Grand Total   | 63                            | 4251 | 132   | 0    | 4446       | 968                           | 4779 | 97    | 0    | 5844       | 376                 | 249  | 77    | 0    | 702        | 178                 | 147  | 970   | 0    | 1295       | 12287      |
| Apprch %      | 1.4                           | 95.6 | 3     | 0    |            | 16.6                          | 81.8 | 1.7   | 0    |            | 53.6                | 35.5 | 11    | 0    |            | 13.7                | 11.4 | 74.9  | 0    |            |            |
| Total %       | 0.5                           | 34.6 | 1.1   | 0    | 36.2       | 7.9                           | 38.9 | 0.8   | 0    | 47.6       | 3.1                 | 2    | 0.6   | 0    | 5.7        | 1.4                 | 1.2  | 7.9   | 0    | 10.5       |            |

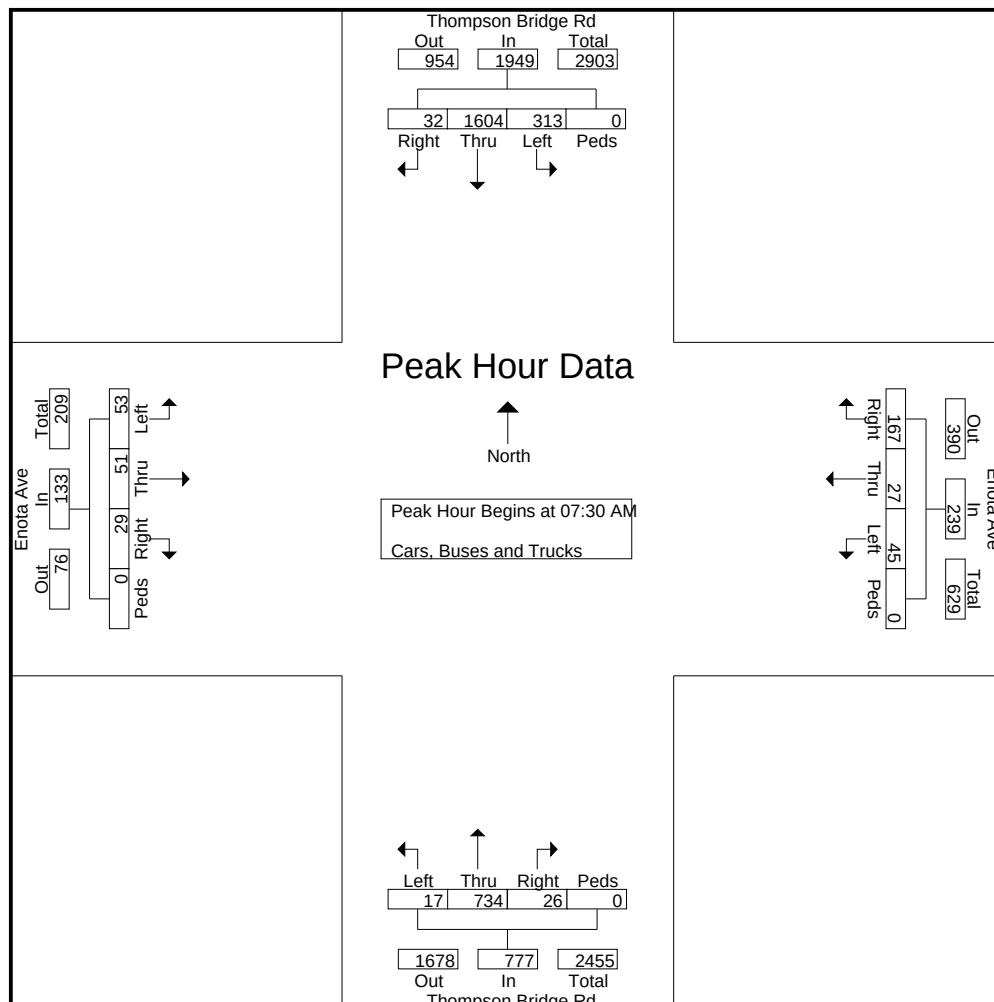
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TMC Data  
Thompson Bridge Rd @ Enota Ave  
Gainesville, GA  
7-9am I 4-6pm

File Name : 39980001  
Site Code : 39980001  
Start Date : 2/16/2017  
Page No : 2

|                                                            | Thompson Bridge Rd Northbound |      |       |      |            | Thompson Bridge Rd Southbound |      |       |      |            | Enota Ave Eastbound |      |       |      |            | Enota Ave Westbound |      |       |      |            |            |
|------------------------------------------------------------|-------------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|---------------------|------|-------|------|------------|---------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                          | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Left                | Thru | Right | Peds | App. Total | Left                | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                               |      |       |      |            |                               |      |       |      |            |                     |      |       |      |            |                     |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                               |      |       |      |            |                               |      |       |      |            |                     |      |       |      |            |                     |      |       |      |            |            |
| 07:30 AM                                                   | 6                             | 177  | 7     | 0    | 190        | 83                            | 414  | 9     | 0    | 506        | 13                  | 12   | 6     | 0    | 31         | 18                  | 7    | 34    | 0    | 59         | 786        |
| 07:45 AM                                                   | 3                             | 193  | 3     | 0    | 199        | 78                            | 455  | 8     | 0    | 541        | 16                  | 10   | 9     | 0    | 35         | 5                   | 3    | 47    | 0    | 55         | 830        |
| 08:00 AM                                                   | 6                             | 194  | 7     | 0    | 207        | 72                            | 367  | 9     | 0    | 448        | 12                  | 17   | 6     | 0    | 35         | 14                  | 6    | 38    | 0    | 58         | 748        |
| 08:15 AM                                                   | 2                             | 170  | 9     | 0    | 181        | 80                            | 368  | 6     | 0    | 454        | 12                  | 12   | 8     | 0    | 32         | 8                   | 11   | 48    | 0    | 67         | 734        |
| Total Volume                                               | 17                            | 734  | 26    | 0    | 777        | 313                           | 1604 | 32    | 0    | 1949       | 53                  | 51   | 29    | 0    | 133        | 45                  | 27   | 167   | 0    | 239        | 3098       |
| % App. Total                                               | 2.2                           | 94.5 | 3.3   | 0    |            | 16.1                          | 82.3 | 1.6   | 0    |            | 39.8                | 38.3 | 21.8  | 0    |            | 18.8                | 11.3 | 69.9  | 0    |            |            |
| PHF                                                        | .708                          | .946 | .722  | .000 | .938       | .943                          | .881 | .889  | .000 | .901       | .828                | .750 | .806  | .000 | .950       | .625                | .614 | .870  | .000 | .892       | .933       |





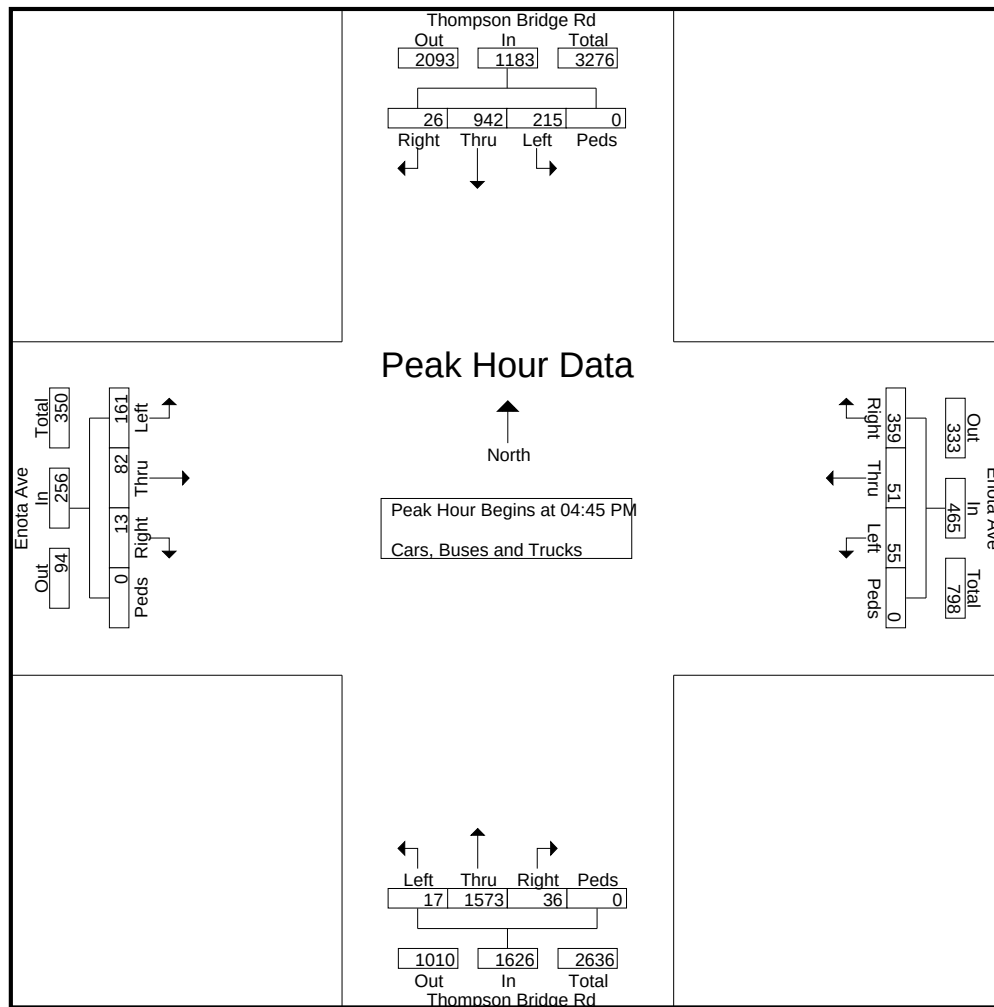
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TMC Data  
Thompson Bridge Rd @ Enota Ave  
Gainesville, GA  
7-9am I 4-6pm

File Name : 39980001  
Site Code : 39980001  
Start Date : 2/16/2017  
Page No : 3

|                                                            | Thompson Bridge Rd Northbound |      |       |      |            | Thompson Bridge Rd Southbound |      |       |      |            | Enota Ave Eastbound |      |       |      |            | Enota Ave Westbound |      |       |      |            |            |
|------------------------------------------------------------|-------------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|---------------------|------|-------|------|------------|---------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                          | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Left                | Thru | Right | Peds | App. Total | Left                | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                               |      |       |      |            |                               |      |       |      |            |                     |      |       |      |            |                     |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 04:45 PM       |                               |      |       |      |            |                               |      |       |      |            |                     |      |       |      |            |                     |      |       |      |            |            |
| 04:45 PM                                                   | 2                             | 372  | 9     | 0    | 383        | 45                            | 218  | 5     | 0    | 268        | 34                  | 24   | 2     | 0    | 60         | 14                  | 17   | 92    | 0    | 123        | 834        |
| 05:00 PM                                                   | 6                             | 419  | 14    | 0    | 439        | 47                            | 227  | 9     | 0    | 283        | 38                  | 13   | 4     | 0    | 55         | 14                  | 10   | 66    | 0    | 90         | 867        |
| 05:15 PM                                                   | 3                             | 401  | 3     | 0    | 407        | 65                            | 252  | 4     | 0    | 321        | 50                  | 23   | 3     | 0    | 76         | 13                  | 14   | 102   | 0    | 129        | 933        |
| 05:30 PM                                                   | 6                             | 381  | 10    | 0    | 397        | 58                            | 245  | 8     | 0    | 311        | 39                  | 22   | 4     | 0    | 65         | 14                  | 10   | 99    | 0    | 123        | 896        |
| Total Volume                                               | 17                            | 1573 | 36    | 0    | 1626       | 215                           | 942  | 26    | 0    | 1183       | 161                 | 82   | 13    | 0    | 256        | 55                  | 51   | 359   | 0    | 465        | 3530       |
| % App. Total                                               | 1                             | 96.7 | 2.2   | 0    |            | 18.2                          | 79.6 | 2.2   | 0    |            | 62.9                | 32   | 5.1   | 0    |            | 11.8                | 11   | 77.2  | 0    |            |            |
| PHF                                                        | .708                          | .939 | .643  | .000 | .926       | .827                          | .935 | .722  | .000 | .921       | .805                | .854 | .813  | .000 | .842       | .982                | .750 | .880  | .000 | .901       | .946       |



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TMC Data  
Enota Ave @ Riverside Dr  
Gainesville, GA  
7-9am I 4-6pm

File Name : 40240002  
Site Code : 40240002  
Start Date : 3/30/2017  
Page No : 1

## Groups Printed- Cars, Buses and Trucks

|               | Riverside Dr Northbound |      |       |      |            | Riverside Dr Southbound |      |       |      |            | Enota Ave Eastbound |      |       |      |            | Enota Ave Westbound |      |       |      |            |            |
|---------------|-------------------------|------|-------|------|------------|-------------------------|------|-------|------|------------|---------------------|------|-------|------|------------|---------------------|------|-------|------|------------|------------|
| Start Time    | Left                    | Thru | Right | Peds | App. Total | Left                    | Thru | Right | Peds | App. Total | Left                | Thru | Right | Peds | App. Total | Left                | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 2                       | 9    | 14    | 0    | 25         | 18                      | 11   | 0     | 0    | 29         | 4                   | 62   | 0     | 0    | 66         | 9                   | 30   | 6     | 0    | 45         | 165        |
| 07:15 AM      | 3                       | 16   | 35    | 0    | 54         | 33                      | 25   | 1     | 0    | 59         | 1                   | 82   | 0     | 0    | 83         | 6                   | 45   | 5     | 0    | 56         | 252        |
| 07:30 AM      | 1                       | 21   | 19    | 0    | 41         | 37                      | 32   | 7     | 0    | 76         | 1                   | 67   | 5     | 0    | 73         | 23                  | 62   | 10    | 0    | 95         | 285        |
| 07:45 AM      | 1                       | 13   | 7     | 0    | 21         | 39                      | 40   | 3     | 0    | 82         | 6                   | 81   | 0     | 0    | 87         | 5                   | 52   | 11    | 0    | 68         | 258        |
| Total         | 7                       | 59   | 75    | 0    | 141        | 127                     | 108  | 11    | 0    | 246        | 12                  | 292  | 5     | 0    | 309        | 43                  | 189  | 32    | 0    | 264        | 960        |
| 08:00 AM      | 4                       | 5    | 4     | 0    | 13         | 28                      | 25   | 5     | 0    | 58         | 1                   | 75   | 2     | 0    | 78         | 11                  | 41   | 14    | 0    | 66         | 215        |
| 08:15 AM      | 5                       | 9    | 3     | 0    | 17         | 14                      | 13   | 3     | 0    | 30         | 2                   | 72   | 3     | 0    | 77         | 7                   | 55   | 13    | 0    | 75         | 199        |
| 08:30 AM      | 2                       | 8    | 1     | 0    | 11         | 12                      | 15   | 4     | 0    | 31         | 1                   | 68   | 1     | 0    | 70         | 3                   | 47   | 7     | 0    | 57         | 169        |
| 08:45 AM      | 1                       | 12   | 4     | 0    | 17         | 19                      | 14   | 5     | 0    | 38         | 2                   | 57   | 3     | 0    | 62         | 9                   | 52   | 7     | 0    | 68         | 185        |
| Total         | 12                      | 34   | 12    | 0    | 58         | 73                      | 67   | 17    | 0    | 157        | 6                   | 272  | 9     | 0    | 287        | 30                  | 195  | 41    | 0    | 266        | 768        |
| *** BREAK *** |                         |      |       |      |            |                         |      |       |      |            |                     |      |       |      |            |                     |      |       |      |            |            |
| 04:00 PM      | 7                       | 25   | 4     | 0    | 36         | 10                      | 20   | 3     | 0    | 33         | 5                   | 64   | 3     | 0    | 72         | 6                   | 83   | 19    | 0    | 108        | 249        |
| 04:15 PM      | 8                       | 42   | 9     | 0    | 59         | 16                      | 20   | 4     | 0    | 40         | 14                  | 70   | 0     | 0    | 84         | 5                   | 80   | 15    | 0    | 100        | 283        |
| 04:30 PM      | 9                       | 70   | 11    | 0    | 90         | 20                      | 34   | 3     | 0    | 57         | 12                  | 62   | 2     | 0    | 76         | 5                   | 74   | 25    | 0    | 104        | 327        |
| 04:45 PM      | 8                       | 91   | 7     | 0    | 106        | 11                      | 16   | 7     | 0    | 34         | 18                  | 66   | 2     | 0    | 86         | 3                   | 84   | 25    | 0    | 112        | 338        |
| Total         | 32                      | 228  | 31    | 0    | 291        | 57                      | 90   | 17    | 0    | 164        | 49                  | 262  | 7     | 0    | 318        | 19                  | 321  | 84    | 0    | 424        | 1197       |
| 05:00 PM      | 6                       | 80   | 8     | 0    | 94         | 16                      | 17   | 12    | 0    | 45         | 16                  | 82   | 3     | 0    | 101        | 2                   | 73   | 31    | 0    | 106        | 346        |
| 05:15 PM      | 5                       | 89   | 10    | 0    | 104        | 14                      | 13   | 1     | 0    | 28         | 16                  | 87   | 2     | 0    | 105        | 3                   | 75   | 30    | 0    | 108        | 345        |
| 05:30 PM      | 3                       | 82   | 12    | 0    | 97         | 18                      | 20   | 9     | 0    | 47         | 17                  | 71   | 3     | 0    | 91         | 18                  | 80   | 23    | 0    | 121        | 356        |
| 05:45 PM      | 8                       | 50   | 16    | 0    | 74         | 10                      | 23   | 1     | 0    | 34         | 8                   | 69   | 4     | 0    | 81         | 4                   | 84   | 20    | 0    | 108        | 297        |
| Total         | 22                      | 301  | 46    | 0    | 369        | 58                      | 73   | 23    | 0    | 154        | 57                  | 309  | 12    | 0    | 378        | 27                  | 312  | 104   | 0    | 443        | 1344       |
| Grand Total   | 73                      | 622  | 164   | 0    | 859        | 315                     | 338  | 68    | 0    | 721        | 124                 | 1135 | 33    | 0    | 1292       | 119                 | 1017 | 261   | 0    | 1397       | 4269       |
| Apprch %      | 8.5                     | 72.4 | 19.1  | 0    |            | 43.7                    | 46.9 | 9.4   | 0    |            | 9.6                 | 87.8 | 2.6   | 0    |            | 8.5                 | 72.8 | 18.7  | 0    |            |            |
| Total %       | 1.7                     | 14.6 | 3.8   | 0    | 20.1       | 7.4                     | 7.9  | 1.6   | 0    | 16.9       | 2.9                 | 26.6 | 0.8   | 0    | 30.3       | 2.8                 | 23.8 | 6.1   | 0    | 32.7       |            |

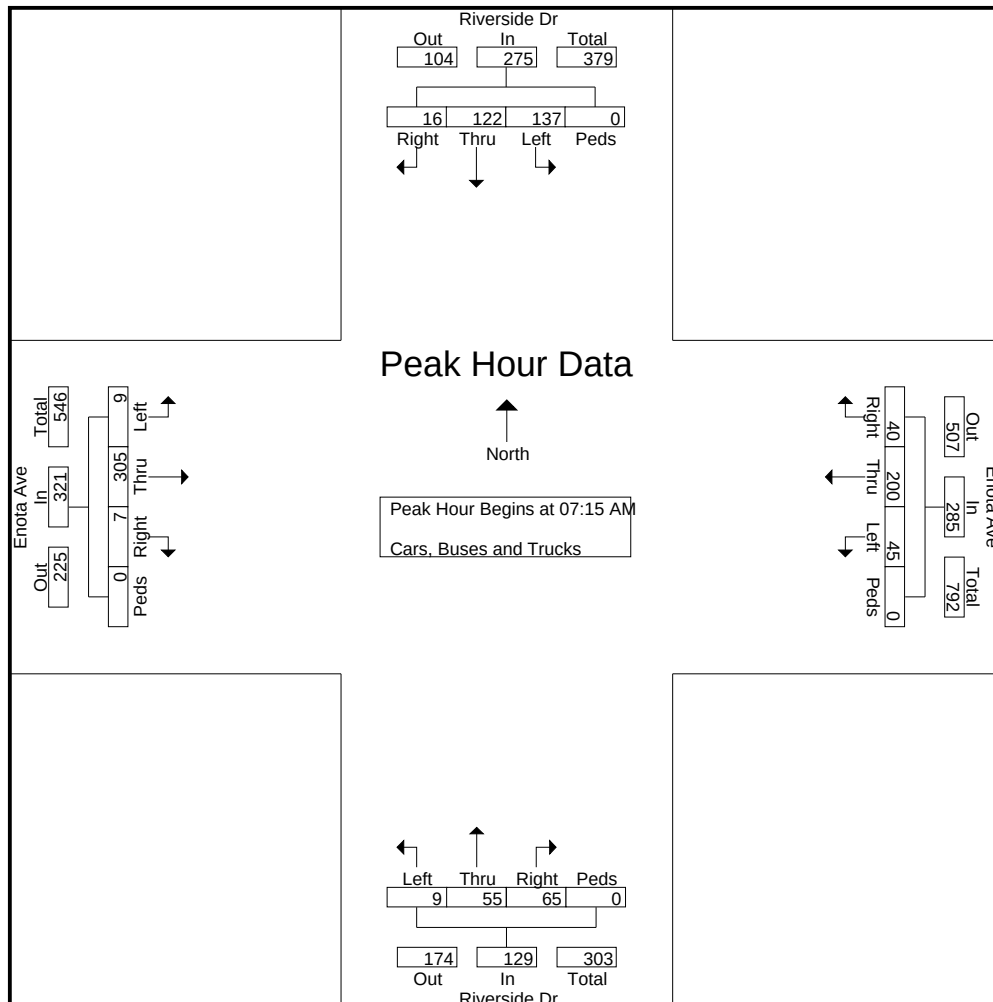
# Reliable Traffic Data Services, LLC

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TMC Data  
Enota Ave @ Riverside Dr  
Gainesville, GA  
7-9am I 4-6pm

File Name : 40240002  
Site Code : 40240002  
Start Date : 3/30/2017  
Page No : 2

|                                                            | Riverside Dr Northbound |      |       |      |            | Riverside Dr Southbound |      |       |      |            | Enota Ave Eastbound |      |       |      |            | Enota Ave Westbound |      |       |      |            |            |
|------------------------------------------------------------|-------------------------|------|-------|------|------------|-------------------------|------|-------|------|------------|---------------------|------|-------|------|------------|---------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                    | Thru | Right | Peds | App. Total | Left                    | Thru | Right | Peds | App. Total | Left                | Thru | Right | Peds | App. Total | Left                | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                         |      |       |      |            |                         |      |       |      |            |                     |      |       |      |            |                     |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:15 AM       |                         |      |       |      |            |                         |      |       |      |            |                     |      |       |      |            |                     |      |       |      |            |            |
| 07:15 AM                                                   | 3                       | 16   | 35    | 0    | 54         | 33                      | 25   | 1     | 0    | 59         | 1                   | 82   | 0     | 0    | 83         | 6                   | 45   | 5     | 0    | 56         | 252        |
| 07:30 AM                                                   | 1                       | 21   | 19    | 0    | 41         | 37                      | 32   | 7     | 0    | 76         | 1                   | 67   | 5     | 0    | 73         | 23                  | 62   | 10    | 0    | 95         | 285        |
| 07:45 AM                                                   | 1                       | 13   | 7     | 0    | 21         | 39                      | 40   | 3     | 0    | 82         | 6                   | 81   | 0     | 0    | 87         | 5                   | 52   | 11    | 0    | 68         | 258        |
| 08:00 AM                                                   | 4                       | 5    | 4     | 0    | 13         | 28                      | 25   | 5     | 0    | 58         | 1                   | 75   | 2     | 0    | 78         | 11                  | 41   | 14    | 0    | 66         | 215        |
| Total Volume                                               | 9                       | 55   | 65    | 0    | 129        | 137                     | 122  | 16    | 0    | 275        | 9                   | 305  | 7     | 0    | 321        | 45                  | 200  | 40    | 0    | 285        | 1010       |
| % App. Total                                               | 7                       | 42.6 | 50.4  | 0    |            | 49.8                    | 44.4 | 5.8   | 0    |            | 2.8                 | 95   | 2.2   | 0    |            | 15.8                | 70.2 | 14    | 0    |            |            |
| PHF                                                        | .563                    | .655 | .464  | .000 | .597       | .878                    | .763 | .571  | .000 | .838       | .375                | .930 | .350  | .000 | .922       | .489                | .806 | .714  | .000 | .750       | .886       |



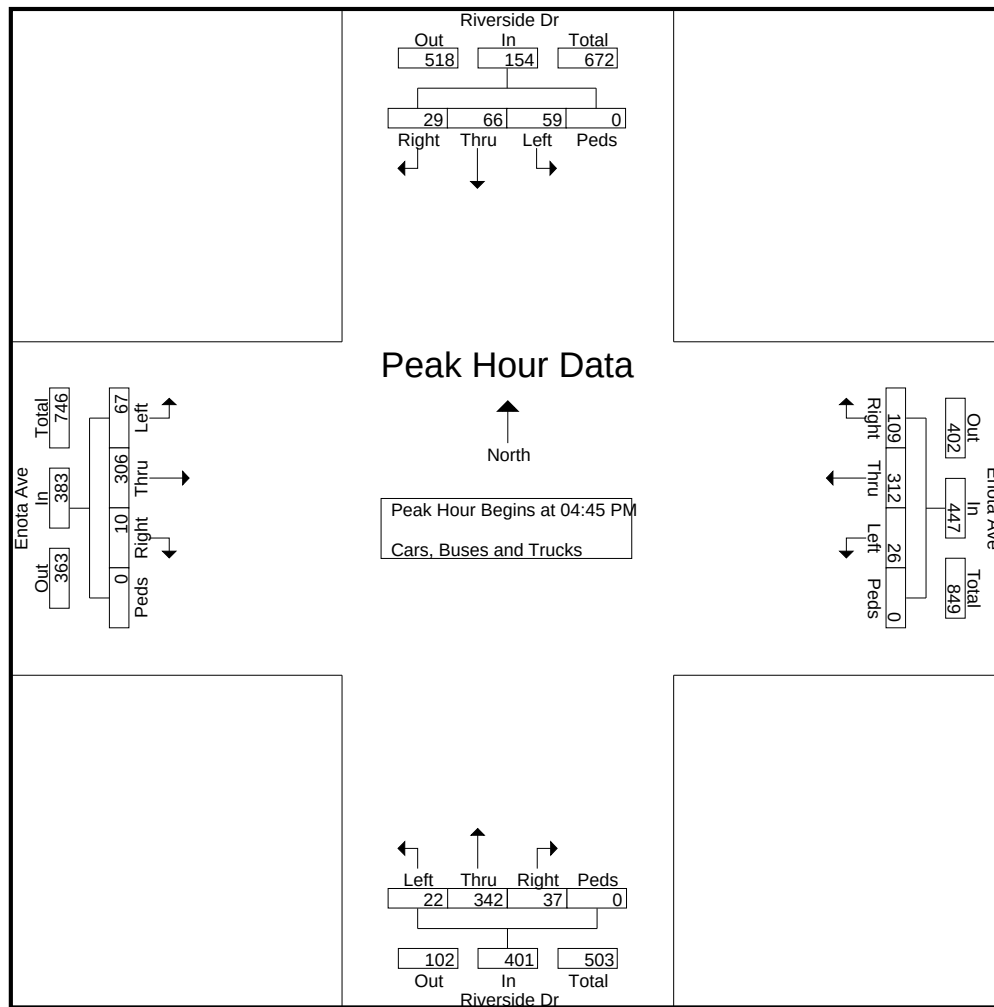
# Reliable Traffic Data Services, LLC

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TMC Data  
Enota Ave @ Riverside Dr  
Gainesville, GA  
7-9am I 4-6pm

File Name : 40240002  
Site Code : 40240002  
Start Date : 3/30/2017  
Page No : 3

|                                                            | Riverside Dr Northbound |      |       |      |            | Riverside Dr Southbound |      |       |      |            | Enota Ave Eastbound |      |       |      |            | Enota Ave Westbound |      |       |      |            |            |
|------------------------------------------------------------|-------------------------|------|-------|------|------------|-------------------------|------|-------|------|------------|---------------------|------|-------|------|------------|---------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                    | Thru | Right | Peds | App. Total | Left                    | Thru | Right | Peds | App. Total | Left                | Thru | Right | Peds | App. Total | Left                | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                         |      |       |      |            |                         |      |       |      |            |                     |      |       |      |            |                     |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 04:45 PM       |                         |      |       |      |            |                         |      |       |      |            |                     |      |       |      |            |                     |      |       |      |            |            |
| 04:45 PM                                                   | 8                       | 91   | 7     | 0    | 106        | 11                      | 16   | 7     | 0    | 34         | 18                  | 66   | 2     | 0    | 86         | 3                   | 84   | 25    | 0    | 112        | 338        |
| 05:00 PM                                                   | 6                       | 80   | 8     | 0    | 94         | 16                      | 17   | 12    | 0    | 45         | 16                  | 82   | 3     | 0    | 101        | 2                   | 73   | 31    | 0    | 106        | 346        |
| 05:15 PM                                                   | 5                       | 89   | 10    | 0    | 104        | 14                      | 13   | 1     | 0    | 28         | 16                  | 87   | 2     | 0    | 105        | 3                   | 75   | 30    | 0    | 108        | 345        |
| 05:30 PM                                                   | 3                       | 82   | 12    | 0    | 97         | 18                      | 20   | 9     | 0    | 47         | 17                  | 71   | 3     | 0    | 91         | 18                  | 80   | 23    | 0    | 121        | 356        |
| Total Volume                                               | 22                      | 342  | 37    | 0    | 401        | 59                      | 66   | 29    | 0    | 154        | 67                  | 306  | 10    | 0    | 383        | 26                  | 312  | 109   | 0    | 447        | 1385       |
| % App. Total                                               | 5.5                     | 85.3 | 9.2   | 0    |            | 38.3                    | 42.9 | 18.8  | 0    |            | 17.5                | 79.9 | 2.6   | 0    |            | 5.8                 | 69.8 | 24.4  | 0    |            |            |
| PHF                                                        | .688                    | .940 | .771  | .000 | .946       | .819                    | .825 | .604  | .000 | .819       | .931                | .879 | .833  | .000 | .912       | .361                | .929 | .879  | .000 | .924       | .973       |



# Reliable Traffic Data Services, LLC

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TMC Data  
SR11 Bus @ S Enota Dr  
Gainesville, GA  
7-9am I 4-6pm

File Name : 40240003  
Site Code : 40240003  
Start Date : 3/30/2017  
Page No : 1

## Groups Printed- Cars, Buses and Trucks

|               | SR11 Bus Northbound |      |       |      |            | SR11 Bus Southbound |      |       |      |            | S Enota Dr Eastbound |      |       |      |            | S Enota Dr Westbound |      |       |      |            |            |
|---------------|---------------------|------|-------|------|------------|---------------------|------|-------|------|------------|----------------------|------|-------|------|------------|----------------------|------|-------|------|------------|------------|
| Start Time    | Left                | Thru | Right | Peds | App. Total | Left                | Thru | Right | Peds | App. Total | Left                 | Thru | Right | Peds | App. Total | Left                 | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 0                   | 52   | 16    | 0    | 68         | 39                  | 122  | 36    | 0    | 197        | 35                   | 40   | 10    | 0    | 85         | 10                   | 20   | 7     | 0    | 37         | 387        |
| 07:15 AM      | 8                   | 69   | 32    | 0    | 109        | 51                  | 180  | 45    | 0    | 276        | 50                   | 59   | 16    | 0    | 125        | 16                   | 38   | 32    | 0    | 86         | 596        |
| 07:30 AM      | 6                   | 90   | 30    | 0    | 126        | 67                  | 181  | 49    | 0    | 297        | 80                   | 70   | 26    | 0    | 176        | 17                   | 44   | 23    | 0    | 84         | 683        |
| 07:45 AM      | 2                   | 122  | 32    | 0    | 156        | 62                  | 210  | 40    | 0    | 312        | 76                   | 75   | 5     | 0    | 156        | 16                   | 29   | 23    | 0    | 68         | 692        |
| Total         | 16                  | 333  | 110   | 0    | 459        | 219                 | 693  | 170   | 0    | 1082       | 241                  | 244  | 57    | 0    | 542        | 59                   | 131  | 85    | 0    | 275        | 2358       |
| 08:00 AM      | 2                   | 123  | 29    | 0    | 154        | 52                  | 226  | 38    | 0    | 316        | 65                   | 54   | 2     | 0    | 121        | 23                   | 19   | 20    | 0    | 62         | 653        |
| 08:15 AM      | 2                   | 113  | 23    | 0    | 138        | 64                  | 235  | 44    | 0    | 343        | 51                   | 55   | 1     | 0    | 107        | 25                   | 35   | 20    | 0    | 80         | 668        |
| 08:30 AM      | 3                   | 91   | 21    | 0    | 115        | 49                  | 160  | 34    | 0    | 243        | 36                   | 50   | 0     | 0    | 86         | 10                   | 22   | 29    | 0    | 61         | 505        |
| 08:45 AM      | 2                   | 75   | 21    | 0    | 98         | 42                  | 125  | 23    | 0    | 190        | 33                   | 41   | 1     | 0    | 75         | 16                   | 29   | 11    | 0    | 56         | 419        |
| Total         | 9                   | 402  | 94    | 0    | 505        | 207                 | 746  | 139   | 0    | 1092       | 185                  | 200  | 4     | 0    | 389        | 74                   | 105  | 80    | 0    | 259        | 2245       |
| *** BREAK *** |                     |      |       |      |            |                     |      |       |      |            |                      |      |       |      |            |                      |      |       |      |            |            |
| 04:00 PM      | 2                   | 147  | 11    | 0    | 160        | 30                  | 143  | 54    | 0    | 227        | 55                   | 25   | 3     | 0    | 83         | 31                   | 50   | 62    | 0    | 143        | 613        |
| 04:15 PM      | 1                   | 168  | 15    | 0    | 184        | 24                  | 199  | 42    | 0    | 265        | 66                   | 28   | 5     | 0    | 99         | 39                   | 59   | 75    | 0    | 173        | 721        |
| 04:30 PM      | 3                   | 154  | 4     | 0    | 161        | 20                  | 148  | 64    | 0    | 232        | 50                   | 37   | 4     | 0    | 91         | 47                   | 66   | 74    | 0    | 187        | 671        |
| 04:45 PM      | 1                   | 142  | 21    | 0    | 164        | 28                  | 168  | 68    | 0    | 264        | 51                   | 37   | 6     | 0    | 94         | 33                   | 70   | 89    | 0    | 192        | 714        |
| Total         | 7                   | 611  | 51    | 0    | 669        | 102                 | 658  | 228   | 0    | 988        | 222                  | 127  | 18    | 0    | 367        | 150                  | 245  | 300   | 0    | 695        | 2719       |
| 05:00 PM      | 8                   | 146  | 11    | 0    | 165        | 25                  | 126  | 81    | 0    | 232        | 51                   | 25   | 4     | 0    | 80         | 71                   | 84   | 109   | 0    | 264        | 741        |
| 05:15 PM      | 5                   | 132  | 5     | 0    | 142        | 26                  | 133  | 50    | 0    | 209        | 58                   | 33   | 10    | 0    | 101        | 84                   | 92   | 88    | 0    | 264        | 716        |
| 05:30 PM      | 3                   | 164  | 11    | 0    | 178        | 27                  | 152  | 51    | 0    | 230        | 71                   | 47   | 8     | 0    | 126        | 49                   | 95   | 68    | 0    | 212        | 746        |
| 05:45 PM      | 15                  | 141  | 10    | 0    | 166        | 29                  | 162  | 68    | 0    | 259        | 56                   | 24   | 8     | 0    | 88         | 27                   | 50   | 70    | 0    | 147        | 660        |
| Total         | 31                  | 583  | 37    | 0    | 651        | 107                 | 573  | 250   | 0    | 930        | 236                  | 129  | 30    | 0    | 395        | 231                  | 321  | 335   | 0    | 887        | 2863       |
| Grand Total   | 63                  | 1929 | 292   | 0    | 2284       | 635                 | 2670 | 787   | 0    | 4092       | 884                  | 700  | 109   | 0    | 1693       | 514                  | 802  | 800   | 0    | 2116       | 10185      |
| Apprch %      | 2.8                 | 84.5 | 12.8  | 0    |            | 15.5                | 65.2 | 19.2  | 0    |            | 52.2                 | 41.3 | 6.4   | 0    |            | 24.3                 | 37.9 | 37.8  | 0    |            |            |
| Total %       | 0.6                 | 18.9 | 2.9   | 0    | 22.4       | 6.2                 | 26.2 | 7.7   | 0    | 40.2       | 8.7                  | 6.9  | 1.1   | 0    | 16.6       | 5                    | 7.9  | 7.9   | 0    | 20.8       |            |

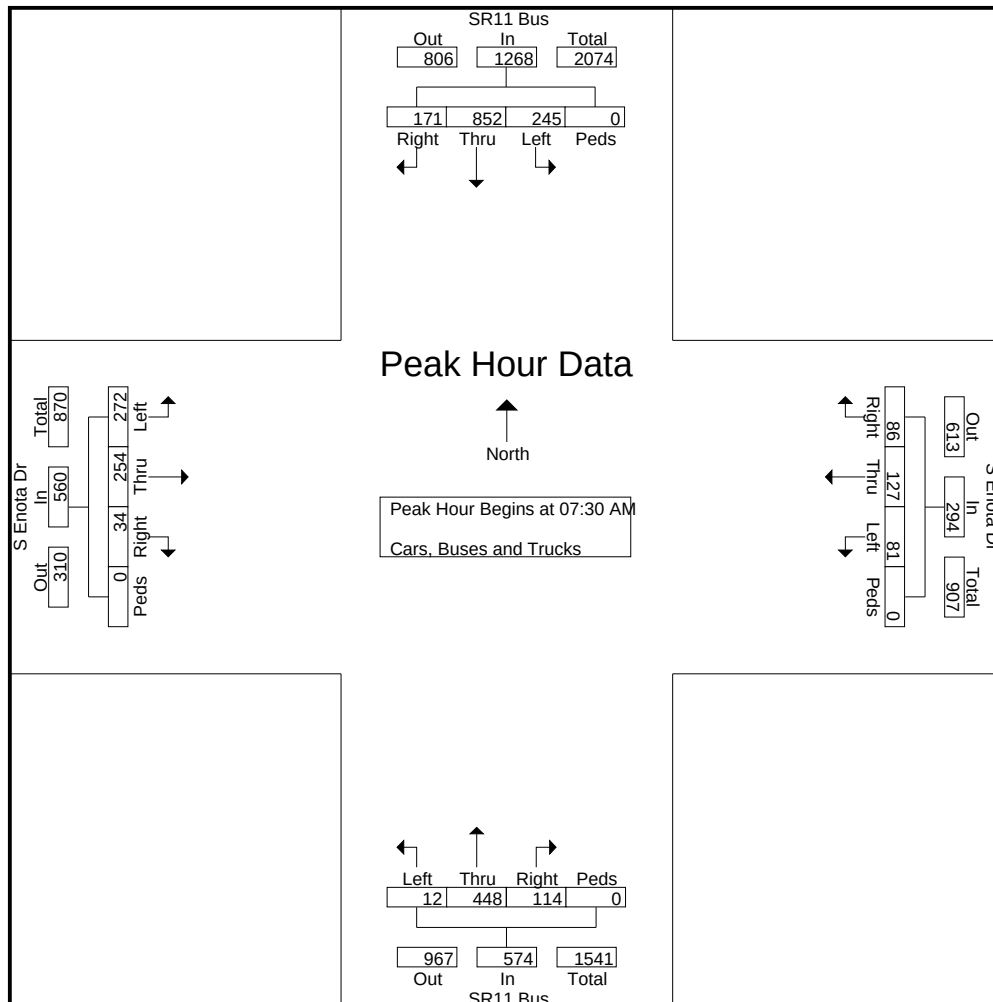
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TMC Data  
SR11 Bus @ S Enota Dr  
Gainesville, GA  
7-9am I 4-6pm

File Name : 40240003  
Site Code : 40240003  
Start Date : 3/30/2017  
Page No : 2

|                                                            | SR11 Bus Northbound |      |       |      |            | SR11 Bus Southbound |      |       |      |            | S Enota Dr Eastbound |      |       |      |            | S Enota Dr Westbound |      |       |      |            |            |
|------------------------------------------------------------|---------------------|------|-------|------|------------|---------------------|------|-------|------|------------|----------------------|------|-------|------|------------|----------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                | Thru | Right | Peds | App. Total | Left                | Thru | Right | Peds | App. Total | Left                 | Thru | Right | Peds | App. Total | Left                 | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                     |      |       |      |            |                     |      |       |      |            |                      |      |       |      |            |                      |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                     |      |       |      |            |                     |      |       |      |            |                      |      |       |      |            |                      |      |       |      |            |            |
| 07:30 AM                                                   | 6                   | 90   | 30    | 0    | 126        | 67                  | 181  | 49    | 0    | 297        | 80                   | 70   | 26    | 0    | 176        | 17                   | 44   | 23    | 0    | 84         | 683        |
| 07:45 AM                                                   | 2                   | 122  | 32    | 0    | 156        | 62                  | 210  | 40    | 0    | 312        | 76                   | 75   | 5     | 0    | 156        | 16                   | 29   | 23    | 0    | 68         | 692        |
| 08:00 AM                                                   | 2                   | 123  | 29    | 0    | 154        | 52                  | 226  | 38    | 0    | 316        | 65                   | 54   | 2     | 0    | 121        | 23                   | 19   | 20    | 0    | 62         | 653        |
| 08:15 AM                                                   | 2                   | 113  | 23    | 0    | 138        | 64                  | 235  | 44    | 0    | 343        | 51                   | 55   | 1     | 0    | 107        | 25                   | 35   | 20    | 0    | 80         | 668        |
| Total Volume                                               | 12                  | 448  | 114   | 0    | 574        | 245                 | 852  | 171   | 0    | 1268       | 272                  | 254  | 34    | 0    | 560        | 81                   | 127  | 86    | 0    | 294        | 2696       |
| % App. Total                                               | 2.1                 | 78   | 19.9  | 0    |            | 19.3                | 67.2 | 13.5  | 0    |            | 48.6                 | 45.4 | 6.1   | 0    |            | 27.6                 | 43.2 | 29.3  | 0    |            |            |
| PHF                                                        | .500                | .911 | .891  | .000 | .920       | .914                | .906 | .872  | .000 | .924       | .850                 | .847 | .327  | .000 | .795       | .810                 | .722 | .935  | .000 | .875       | .974       |



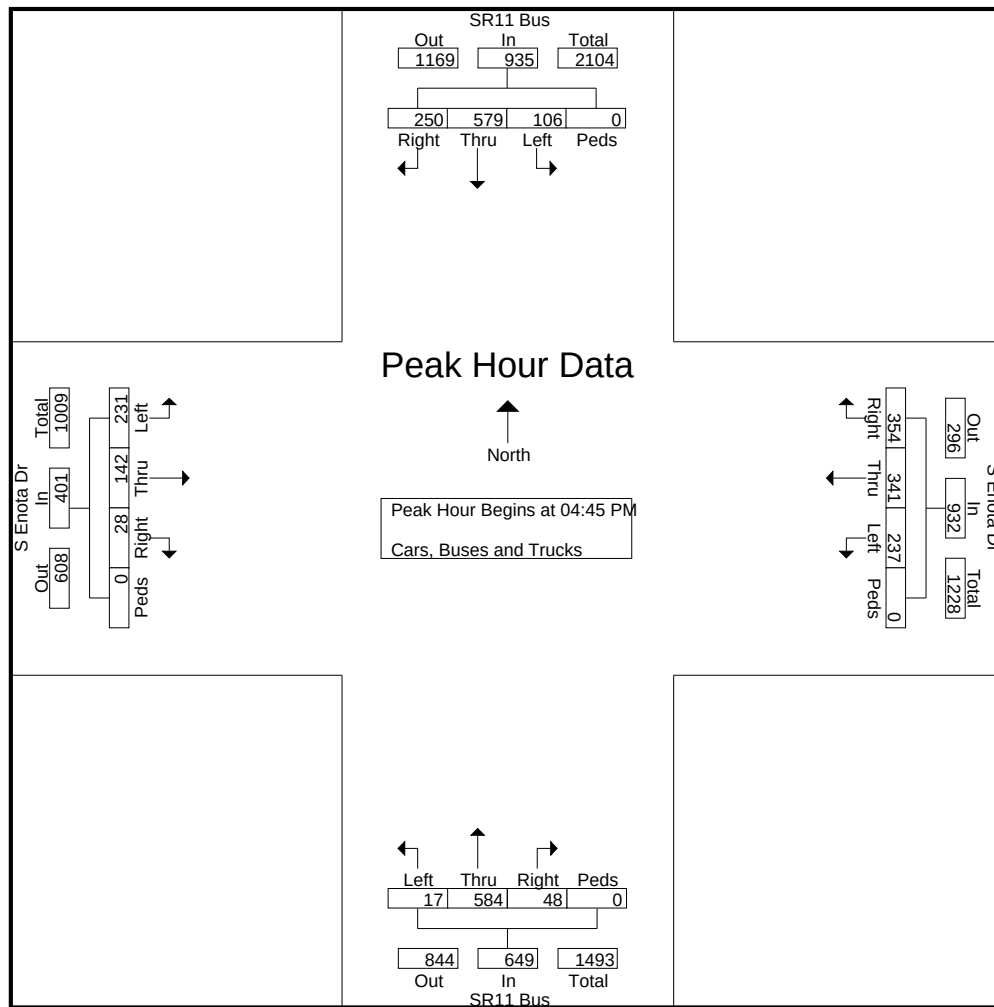
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TMC Data  
SR11 Bus @ S Enota Dr  
Gainesville, GA  
7-9am I 4-6pm

File Name : 40240003  
Site Code : 40240003  
Start Date : 3/30/2017  
Page No : 3

|                                                            | SR11 Bus Northbound |      |       |      |            | SR11 Bus Southbound |      |       |      |            | S Enota Dr Eastbound |      |       |      |            | S Enota Dr Westbound |      |       |      |            |            |
|------------------------------------------------------------|---------------------|------|-------|------|------------|---------------------|------|-------|------|------------|----------------------|------|-------|------|------------|----------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                | Thru | Right | Peds | App. Total | Left                | Thru | Right | Peds | App. Total | Left                 | Thru | Right | Peds | App. Total | Left                 | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                     |      |       |      |            |                     |      |       |      |            |                      |      |       |      |            |                      |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 04:45 PM       |                     |      |       |      |            |                     |      |       |      |            |                      |      |       |      |            |                      |      |       |      |            |            |
| 04:45 PM                                                   | 1                   | 142  | 21    | 0    | 164        | 28                  | 168  | 68    | 0    | 264        | 51                   | 37   | 6     | 0    | 94         | 33                   | 70   | 89    | 0    | 192        | 714        |
| 05:00 PM                                                   | 8                   | 146  | 11    | 0    | 165        | 25                  | 126  | 81    | 0    | 232        | 51                   | 25   | 4     | 0    | 80         | 71                   | 84   | 109   | 0    | 264        | 741        |
| 05:15 PM                                                   | 5                   | 132  | 5     | 0    | 142        | 26                  | 133  | 50    | 0    | 209        | 58                   | 33   | 10    | 0    | 101        | 84                   | 92   | 88    | 0    | 264        | 716        |
| 05:30 PM                                                   | 3                   | 164  | 11    | 0    | 178        | 27                  | 152  | 51    | 0    | 230        | 71                   | 47   | 8     | 0    | 126        | 49                   | 95   | 68    | 0    | 212        | 746        |
| Total Volume                                               | 17                  | 584  | 48    | 0    | 649        | 106                 | 579  | 250   | 0    | 935        | 231                  | 142  | 28    | 0    | 401        | 237                  | 341  | 354   | 0    | 932        | 2917       |
| % App. Total                                               | 2.6                 | 90   | 7.4   | 0    |            | 11.3                | 61.9 | 26.7  | 0    |            | 57.6                 | 35.4 | 7     | 0    |            | 25.4                 | 36.6 | 38    | 0    |            |            |
| PHF                                                        | .531                | .890 | .571  | .000 | .912       | .946                | .862 | .772  | .000 | .885       | .813                 | .755 | .700  | .000 | .796       | .705                 | .897 | .812  | .000 | .883       | .978       |



# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-9124-004

Day: Wednesday

City: Gainesville

Date: 2/22/2017

| AM                          |                          |         |         |                          |         |         |           |         |         |           |         |         |              |
|-----------------------------|--------------------------|---------|---------|--------------------------|---------|---------|-----------|---------|---------|-----------|---------|---------|--------------|
| NS/EW Streets:              | Green St NE_Riverside Dr |         |         | Green St NE_Riverside Dr |         |         | Holly Dr  |         |         | Holly Dr  |         |         |              |
|                             | NORTHBOUND               |         |         | SOUTHBOUND               |         |         | EASTBOUND |         |         | WESTBOUND |         |         |              |
| LANES:                      | NL<br>1                  | NT<br>2 | NR<br>2 | SL<br>0                  | ST<br>2 | SR<br>0 | EL<br>0   | ET<br>1 | ER<br>0 | WL<br>0   | WT<br>2 | WR<br>0 | TOTAL        |
| 7:00 AM                     | 2                        | 114     | 57      | 0                        | 252     | 23      | 0         | 0       | 8       | 80        | 25      | 0       | 561          |
| 7:15 AM                     | 3                        | 135     | 98      | 0                        | 268     | 27      | 0         | 0       | 17      | 111       | 47      | 0       | 706          |
| 7:30 AM                     | 8                        | 183     | 89      | 0                        | 389     | 39      | 0         | 0       | 14      | 124       | 50      | 0       | 896          |
| 7:45 AM                     | 3                        | 189     | 71      | 0                        | 360     | 28      | 0         | 2       | 11      | 125       | 50      | 0       | 839          |
| 8:00 AM                     | 4                        | 160     | 60      | 0                        | 314     | 40      | 0         | 0       | 10      | 119       | 54      | 0       | 761          |
| 8:15 AM                     | 4                        | 151     | 76      | 0                        | 328     | 25      | 0         | 0       | 16      | 93        | 35      | 0       | 728          |
| 8:30 AM                     | 4                        | 147     | 80      | 0                        | 244     | 22      | 1         | 0       | 14      | 91        | 47      | 0       | 650          |
| 8:45 AM                     | 5                        | 181     | 79      | 0                        | 269     | 22      | 0         | 0       | 13      | 105       | 34      | 0       | 708          |
| <b>TOTAL VOLUMES :</b>      | 33                       | 1260    | 610     | 0                        | 2424    | 226     | 1         | 2       | 103     | 848       | 342     | 0       | 5849         |
| <b>APPROACH %'s :</b>       | 1.73%                    | 66.21%  | 32.05%  | 0.00%                    | 91.47%  | 8.53%   | 0.94%     | 1.89%   | 97.17%  | 71.26%    | 28.74%  | 0.00%   |              |
| <b>PEAK HR START TIME :</b> | 730 AM                   |         |         |                          |         |         |           |         |         |           |         |         | <b>TOTAL</b> |
| <b>PEAK HR VOL :</b>        | 19                       | 683     | 296     | 0                        | 1391    | 132     | 0         | 2       | 51      | 461       | 189     | 0       | 3224         |
| <b>PEAK HR FACTOR :</b>     | 0.891                    |         |         | 0.890                    |         |         | 0.828     |         |         | 0.929     |         |         | 0.900        |

CONTROL : Signalized



# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-9124-004

Day: Wednesday

City: Gainesville

Date: 2/22/2017

| PM                          |                          |         |         |                          |         |         |           |         |         |           |         |         |              |
|-----------------------------|--------------------------|---------|---------|--------------------------|---------|---------|-----------|---------|---------|-----------|---------|---------|--------------|
| NS/EW Streets:              | Green St NE_Riverside Dr |         |         | Green St NE_Riverside Dr |         |         | Holly Dr  |         |         | Holly Dr  |         |         |              |
|                             | NORTHBOUND               |         |         | SOUTHBOUND               |         |         | EASTBOUND |         |         | WESTBOUND |         |         |              |
| LANES:                      | NL<br>1                  | NT<br>2 | NR<br>2 | SL<br>0                  | ST<br>2 | SR<br>0 | EL<br>0   | ET<br>1 | ER<br>0 | WL<br>0   | WT<br>2 | WR<br>0 | TOTAL        |
| 4:00 PM                     | 11                       | 255     | 138     | 0                        | 200     | 33      | 0         | 0       | 9       | 106       | 51      | 0       | 803          |
| 4:15 PM                     | 7                        | 326     | 114     | 0                        | 154     | 25      | 0         | 0       | 13      | 62        | 44      | 0       | 745          |
| 4:30 PM                     | 7                        | 316     | 144     | 0                        | 193     | 25      | 0         | 0       | 12      | 92        | 47      | 0       | 836          |
| 4:45 PM                     | 10                       | 314     | 174     | 0                        | 149     | 20      | 0         | 0       | 9       | 88        | 49      | 0       | 813          |
| 5:00 PM                     | 14                       | 380     | 174     | 0                        | 189     | 34      | 0         | 0       | 1       | 94        | 49      | 0       | 935          |
| 5:15 PM                     | 10                       | 346     | 172     | 0                        | 201     | 36      | 0         | 0       | 13      | 106       | 66      | 0       | 950          |
| 5:30 PM                     | 10                       | 327     | 164     | 0                        | 179     | 29      | 0         | 0       | 6       | 104       | 58      | 0       | 877          |
| 5:45 PM                     | 12                       | 359     | 143     | 0                        | 243     | 26      | 0         | 0       | 15      | 83        | 45      | 0       | 926          |
| <b>TOTAL VOLUMES :</b>      | 81                       | 2623    | 1223    | 0                        | 1508    | 228     | 0         | 0       | 78      | 735       | 409     | 0       | 6885         |
| <b>APPROACH %'s :</b>       | 2.06%                    | 66.79%  | 31.14%  | 0.00%                    | 86.87%  | 13.13%  | 0.00%     | 0.00%   | 100.00% | 64.25%    | 35.75%  | 0.00%   |              |
| <b>PEAK HR START TIME :</b> | 500 PM                   |         |         |                          |         |         |           |         |         |           |         |         | <b>TOTAL</b> |
| <b>PEAK HR VOL :</b>        | 46                       | 1412    | 653     | 0                        | 812     | 125     | 0         | 0       | 35      | 387       | 218     | 0       | 3688         |
| <b>PEAK HR FACTOR :</b>     | 0.929                    |         |         | 0.871                    |         |         | 0.583     |         |         | 0.879     |         |         | 0.971        |

CONTROL : Signalized

# ITM Peak Hour Summary

Prepared by:



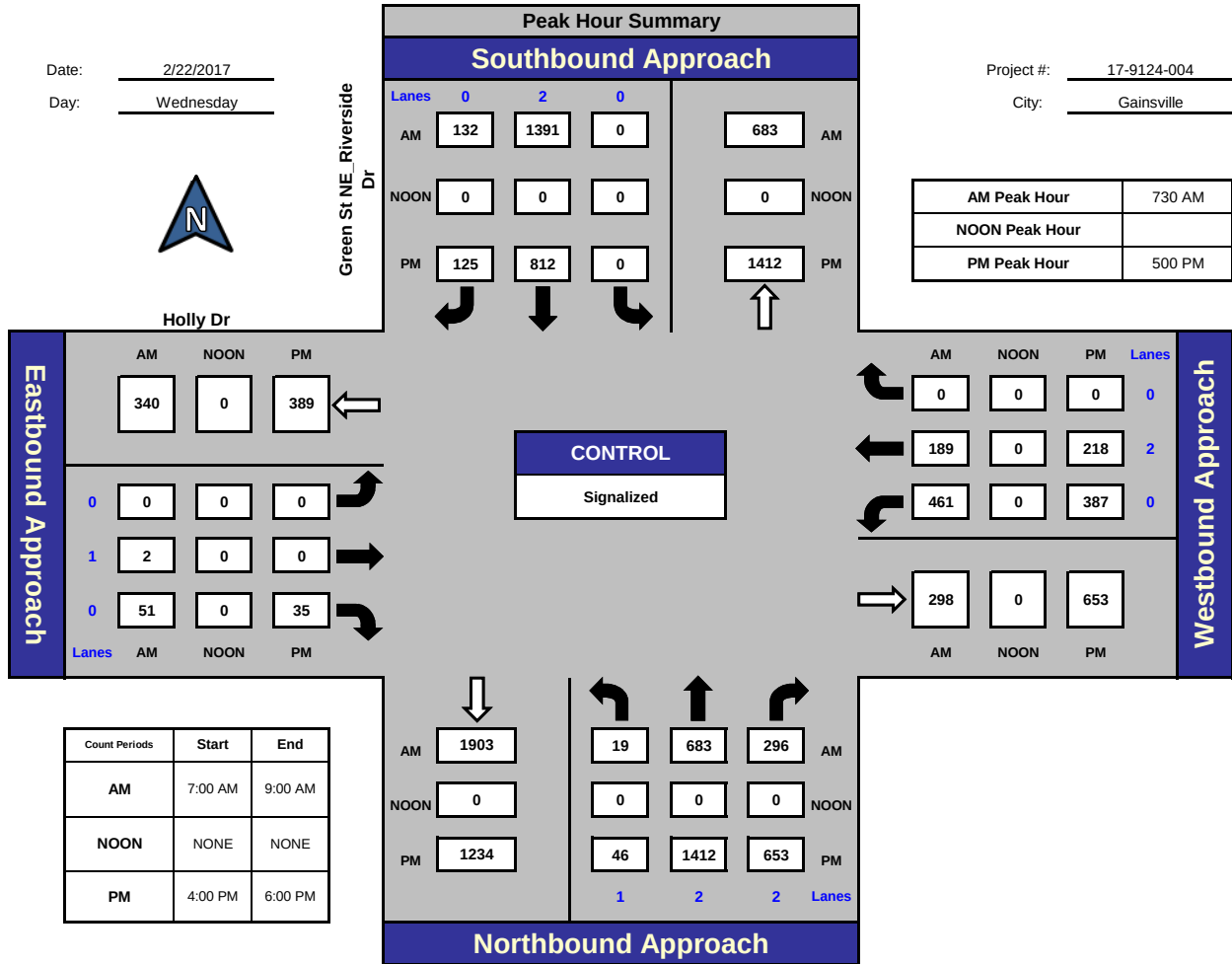
National Data & Surveying Services

## Green St NE Riverside Dr and Holly Dr, Gainesville

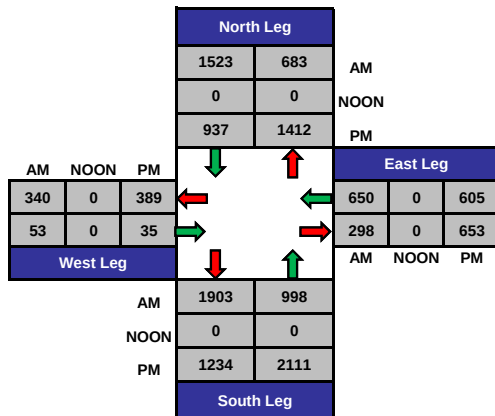
Date: 2/22/2017  
Day: Wednesday



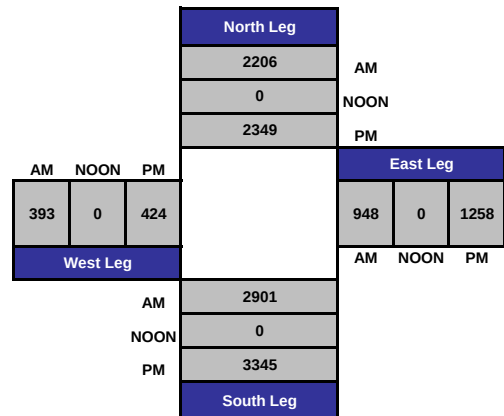
Project #: 17-9124-004  
City: Gainesville



### Total Ins & Outs



### Total Volume Per Leg



# PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 17-9124-004  
N/S Street: Green St NE\_Riverside Dr  
E/W Street: Holly Dr  
DATE: 2/22/2017  
CITY: Gainesville

DAY: Wednesday

## A M

### PEDESTRIANS

| T I M E       | NORTH LEG |          | SOUTH LEG |          | EAST LEG |          | WEST LEG |          |
|---------------|-----------|----------|-----------|----------|----------|----------|----------|----------|
|               | EB        | WB       | EB        | WB       | NB       | SB       | NB       | SB       |
| 7:00 AM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 7:15 AM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 7:30 AM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 7:45 AM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 8:00 AM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 8:15 AM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 8:30 AM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 8:45 AM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| <b>TOTALS</b> | <b>0</b>  | <b>0</b> | <b>0</b>  | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> |

### BIKES

| T I M E       | NB       |          |          | SB       |          |          | EB       |          |          | WB       |          |          |
|---------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|               | NL       | NT       | NR       | SL       | ST       | SR       | EL       | ET       | ER       | WL       | WT       | WR       |
| 7:00 AM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 7:15 AM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 7:30 AM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 7:45 AM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 0        | 0        |
| 8:00 AM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 0        |
| 8:15 AM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 8:30 AM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 8:45 AM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| <b>TOTALS</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>1</b> | <b>1</b> | <b>0</b> | <b>0</b> |

## P M

### PEDESTRIANS

| T I M E       | NORTH LEG |          | SOUTH LEG |          | EAST LEG |          | WEST LEG |          |
|---------------|-----------|----------|-----------|----------|----------|----------|----------|----------|
|               | EB        | WB       | EB        | WB       | NB       | SB       | NB       | SB       |
| 4:00 PM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 4:15 PM       | 0         | 0        | 0         | 0        | 0        | 0        | 1        | 1        |
| 4:30 PM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 4:45 PM       | 0         | 0        | 0         | 0        | 0        | 0        | 1        | 0        |
| 5:00 PM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 5:15 PM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 5:30 PM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 5:45 PM       | 0         | 0        | 0         | 0        | 0        | 0        | 1        | 0        |
| <b>TOTALS</b> | <b>0</b>  | <b>0</b> | <b>0</b>  | <b>0</b> | <b>0</b> | <b>0</b> | <b>3</b> | <b>1</b> |

### BIKES

| T I M E       | NB       |          |          | SB       |          |          | EB       |          |          | WB       |          |          |
|---------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|               | NL       | NT       | NR       | SL       | ST       | SR       | EL       | ET       | ER       | WL       | WT       | WR       |
| 4:00 PM       | 0        | 0        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 4:15 PM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 4:30 PM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 4:45 PM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 5:00 PM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 5:15 PM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 5:30 PM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 5:45 PM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| <b>TOTALS</b> | <b>0</b> | <b>0</b> | <b>1</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> |

Project ID: 17-9124-004

Location: Green St NE\_Riverside Dr &amp; Holly Dr

City: Gainesville

Day: Wednesday

Date: 2/22/2017

| Peak Start Times |          |
|------------------|----------|
| AM               | 7:00 AM  |
| MD               | 12:00 AM |
| PM               | 4:00 PM  |

## Groups Printed - Cars, PU, Vans - Heavy Trucks

|                  | Green St NE_Riverside Dr<br>Northbound |      |      |      |            | Green St NE_Riverside Dr<br>Southbound |      |       |      |            | Holly Dr<br>Eastbound |       |       |       |            | Holly Dr<br>Westbound |      |     |      |            |            |
|------------------|----------------------------------------|------|------|------|------------|----------------------------------------|------|-------|------|------------|-----------------------|-------|-------|-------|------------|-----------------------|------|-----|------|------------|------------|
| Start Time       | Left                                   | Thru | Rgt  | Peds | App. Total | Left                                   | Thru | Rgt   | Peds | App. Total | Left                  | Thru  | Rgt   | Peds  | App. Total | Left                  | Thru | Rgt | Peds | App. Total | Int. Total |
| 7:00 AM          | 2                                      | 114  | 57   | 0    | 173        | 0                                      | 252  | 23    | 0    | 275        | 0                     | 0     | 8     | 0     | 8          | 80                    | 25   | 0   | 0    | 105        | 561        |
| 7:15 AM          | 3                                      | 135  | 98   | 0    | 236        | 0                                      | 268  | 27    | 0    | 295        | 0                     | 0     | 17    | 0     | 17         | 111                   | 47   | 0   | 0    | 158        | 706        |
| 7:30 AM          | 8                                      | 183  | 89   | 0    | 280        | 0                                      | 389  | 39    | 0    | 428        | 0                     | 0     | 14    | 0     | 14         | 124                   | 50   | 0   | 0    | 174        | 896        |
| 7:45 AM          | 3                                      | 189  | 71   | 0    | 263        | 0                                      | 360  | 28    | 0    | 388        | 0                     | 2     | 11    | 0     | 13         | 125                   | 50   | 0   | 0    | 175        | 839        |
| Total            | 16                                     | 621  | 315  | 0    | 952        | 0                                      | 1269 | 117   | 0    | 1386       | 0                     | 2     | 50    | 0     | 52         | 440                   | 172  | 0   | 0    | 612        | 3002       |
| 8:00 AM          | 4                                      | 160  | 60   | 0    | 224        | 0                                      | 314  | 40    | 0    | 354        | 0                     | 0     | 10    | 0     | 10         | 119                   | 54   | 0   | 0    | 173        | 761        |
| 8:15 AM          | 4                                      | 151  | 76   | 0    | 231        | 0                                      | 328  | 25    | 0    | 353        | 0                     | 0     | 16    | 0     | 16         | 93                    | 35   | 0   | 0    | 128        | 728        |
| 8:30 AM          | 4                                      | 147  | 80   | 0    | 231        | 0                                      | 244  | 22    | 0    | 266        | 1                     | 0     | 14    | 0     | 15         | 91                    | 47   | 0   | 0    | 138        | 650        |
| 8:45 AM          | 5                                      | 181  | 79   | 0    | 265        | 0                                      | 269  | 22    | 0    | 291        | 0                     | 0     | 13    | 0     | 13         | 105                   | 34   | 0   | 0    | 139        | 708        |
| Total            | 17                                     | 639  | 295  | 0    | 951        | 0                                      | 1155 | 109   | 0    | 1264       | 1                     | 0     | 53    | 0     | 54         | 408                   | 170  | 0   | 0    | 578        | 2847       |
| ***BREAK***      |                                        |      |      |      |            |                                        |      |       |      |            |                       |       |       |       |            |                       |      |     |      |            |            |
| 4:00 PM          | 11                                     | 255  | 138  | 0    | 404        | 0                                      | 200  | 33    | 0    | 233        | 0                     | 0     | 9     | 0     | 9          | 106                   | 51   | 0   | 0    | 157        | 803        |
| 4:15 PM          | 7                                      | 326  | 114  | 0    | 447        | 0                                      | 154  | 25    | 0    | 179        | 0                     | 0     | 13    | 2     | 13         | 62                    | 44   | 0   | 0    | 106        | 745        |
| 4:30 PM          | 7                                      | 316  | 144  | 0    | 467        | 0                                      | 193  | 25    | 0    | 218        | 0                     | 0     | 12    | 0     | 12         | 92                    | 47   | 0   | 0    | 139        | 836        |
| 4:45 PM          | 10                                     | 314  | 174  | 0    | 498        | 0                                      | 149  | 20    | 0    | 169        | 0                     | 0     | 9     | 1     | 9          | 88                    | 49   | 0   | 0    | 137        | 813        |
| Total            | 35                                     | 1211 | 570  | 0    | 1816       | 0                                      | 696  | 103   | 0    | 799        | 0                     | 0     | 43    | 3     | 43         | 348                   | 191  | 0   | 0    | 539        | 3197       |
| 5:00 PM          | 14                                     | 380  | 174  | 0    | 568        | 0                                      | 189  | 34    | 0    | 223        | 0                     | 0     | 1     | 0     | 1          | 94                    | 49   | 0   | 0    | 143        | 935        |
| 5:15 PM          | 10                                     | 346  | 172  | 0    | 528        | 0                                      | 201  | 36    | 0    | 237        | 0                     | 0     | 13    | 0     | 13         | 106                   | 66   | 0   | 0    | 172        | 950        |
| 5:30 PM          | 10                                     | 327  | 164  | 0    | 501        | 0                                      | 179  | 29    | 0    | 208        | 0                     | 0     | 6     | 0     | 6          | 104                   | 58   | 0   | 0    | 162        | 877        |
| 5:45 PM          | 12                                     | 359  | 143  | 0    | 514        | 0                                      | 243  | 26    | 0    | 269        | 0                     | 0     | 15    | 1     | 15         | 83                    | 45   | 0   | 0    | 128        | 926        |
| Total            | 46                                     | 1412 | 653  | 0    | 2111       | 0                                      | 812  | 125   | 0    | 937        | 0                     | 0     | 35    | 1     | 35         | 387                   | 218  | 0   | 0    | 605        | 3688       |
| Grand Total      | 114                                    | 3883 | 1833 | 0    | 5830       | 0                                      | 3932 | 454   | 0    | 4386       | 1                     | 2     | 181   | 4     | 184        | 1583                  | 751  | 0   | 0    | 2334       | 12734      |
| Apprch %         | 2.0                                    | 66.6 | 31.4 | 0.0  |            | 0.0                                    | 89.6 | 10.4  | 0.0  |            | 0.5                   | 1.1   | 98.4  | 2.2   |            | 67.8                  | 32.2 | 0.0 | 0.0  |            |            |
| Total %          | 0.9                                    | 30.5 | 14.4 | 0.0  | 45.8       | 0.0                                    | 30.9 | 3.6   | 0.0  | 34.4       | 0.0                   | 0.0   | 1.4   | 0.0   | 1.4        | 12.4                  | 5.9  | 0.0 | 0.0  | 18.3       |            |
| Cars, PU, Vans   | 114                                    | 3826 | 1828 | 0    | 5768       | 0                                      | 3881 | 454   | 0    | 4335       | 1                     | 2     | 181   | 4     | 184        | 1575                  | 750  | 0   | 0    | 2325       | 12612      |
| % Cars, PU, Vans | 100.0                                  | 98.5 | 99.7 | 0.0  | 98.9       | 0.0                                    | 98.7 | 100.0 | 0.0  | 98.8       | 100.0                 | 100.0 | 100.0 | 100.0 | 100.0      | 99.5                  | 99.9 | 0.0 | 0.0  | 99.6       | 99.0       |
| Heavy Trucks     | 0                                      | 57   | 5    |      | 62         | 0                                      | 51   | 0     |      | 51         | 0                     | 0     | 0     |       | 0          | 8                     | 1    | 0   |      | 9          | 122        |
| %Heavy Trucks    | 0.0                                    | 1.5  | 0.3  | 0.0  | 1.1        | 0.0                                    | 1.3  | 0.0   | 0.0  | 1.2        | 0.0                   | 0.0   | 0.0   | 0.0   | 0.0        | 0.5                   | 0.1  | 0.0 | 0.0  | 0.4        | 1.0        |

Project ID: 17-9124-004

Location: Green St NE\_Riverside Dr &amp;

City: Gainesville

**PEAK HOURS**

Day: Wednesday

Date: 2/22/2017

**AM**

|                                                      | Green St NE_Riverside Dr<br>Northbound |      |      |            | Green St NE_Riverside Dr<br>Southbound |      |       |            | Holly Dr<br>Eastbound |       |       |            | Holly Dr<br>Westbound |       |     |            |            |
|------------------------------------------------------|----------------------------------------|------|------|------------|----------------------------------------|------|-------|------------|-----------------------|-------|-------|------------|-----------------------|-------|-----|------------|------------|
| Start Time                                           | Left                                   | Thru | Rgt  | App. Total | Left                                   | Thru | Rgt   | App. Total | Left                  | Thru  | Rgt   | App. Total | Left                  | Thru  | Rgt | App. Total | Int. Total |
| Peak Hour Analysis from 07:00 AM to 09:00 AM         |                                        |      |      |            |                                        |      |       |            |                       |       |       |            |                       |       |     |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM |                                        |      |      |            |                                        |      |       |            |                       |       |       |            |                       |       |     |            |            |
| 7:30 AM                                              | 8                                      | 183  | 89   | 280        | 0                                      | 389  | 39    | 428        | 0                     | 0     | 14    | 14         | 124                   | 50    | 0   | 174        | 896        |
| 7:45 AM                                              | 3                                      | 189  | 71   | 263        | 0                                      | 360  | 28    | 388        | 0                     | 2     | 11    | 13         | 125                   | 50    | 0   | 175        | 839        |
| 8:00 AM                                              | 4                                      | 160  | 60   | 224        | 0                                      | 314  | 40    | 354        | 0                     | 0     | 10    | 10         | 119                   | 54    | 0   | 173        | 761        |
| 8:15 AM                                              | 4                                      | 151  | 76   | 231        | 0                                      | 328  | 25    | 353        | 0                     | 0     | 16    | 16         | 93                    | 35    | 0   | 128        | 728        |
| Total Volume                                         | 19                                     | 683  | 296  | 998        | 0                                      | 1391 | 132   | 1523       | 0                     | 2     | 51    | 53         | 461                   | 189   | 0   | 650        | 3224       |
| % App. Total                                         | 1.9                                    | 68.4 | 29.7 | 100        | 0.0                                    | 91.3 | 8.7   | 100        | 0.0                   | 3.8   | 96.2  | 100        | 70.9                  | 29.1  | 0.0 | 100        |            |
| PHF                                                  | 0.891                                  |      |      |            | 0.890                                  |      |       |            | 0.828                 |       |       |            | 0.929                 |       |     |            |            |
| Cars, PU, Vans                                       | 19                                     | 668  | 294  | 981        | 0                                      | 1377 | 132   | 1509       | 0                     | 2     | 51    | 53         | 458                   | 189   | 0   | 647        | 3190       |
| % Cars, PU, Vans                                     | 100.0                                  | 97.8 | 99.3 | 98.3       | 0.0                                    | 99.0 | 100.0 | 99.1       | 0.0                   | 100.0 | 100.0 | 100.0      | 99.3                  | 100.0 | 0.0 | 99.5       | 98.9       |
| Heavy Trucks                                         | 0                                      | 15   | 2    | 17         | 0                                      | 14   | 0     | 14         | 0                     | 0     | 0     | 0          | 3                     | 0     | 0   | 3          | 34         |
| %Heavy Trucks                                        | 0.0                                    | 2.2  | 0.7  | 1.7        | 0.0                                    | 1.0  | 0.0   | 0.9        | 0.0                   | 0.0   | 0.0   | 0.0        | 0.7                   | 0.0   | 0.0 | 0.5        | 1.1        |

**PM**

|                                                      | Green St NE_Riverside Dr<br>Northbound |      |      |            | Green St NE_Riverside Dr<br>Southbound |      |       |            | Holly Dr<br>Eastbound |      |       |            | Holly Dr<br>Westbound |       |     |            |            |
|------------------------------------------------------|----------------------------------------|------|------|------------|----------------------------------------|------|-------|------------|-----------------------|------|-------|------------|-----------------------|-------|-----|------------|------------|
| Start Time                                           | Left                                   | Thru | Rgt  | App. Total | Left                                   | Thru | Rgt   | App. Total | Left                  | Thru | Rgt   | App. Total | Left                  | Thru  | Rgt | App. Total | Int. Total |
| Peak Hour Analysis from 04:00 PM to 06:00 PM         |                                        |      |      |            |                                        |      |       |            |                       |      |       |            |                       |       |     |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM |                                        |      |      |            |                                        |      |       |            |                       |      |       |            |                       |       |     |            |            |
| 5:00 PM                                              | 14                                     | 380  | 174  | 568        | 0                                      | 189  | 34    | 223        | 0                     | 0    | 1     | 1          | 94                    | 49    | 0   | 143        | 935        |
| 5:15 PM                                              | 10                                     | 346  | 172  | 528        | 0                                      | 201  | 36    | 237        | 0                     | 0    | 13    | 13         | 106                   | 66    | 0   | 172        | 950        |
| 5:30 PM                                              | 10                                     | 327  | 164  | 501        | 0                                      | 179  | 29    | 208        | 0                     | 0    | 6     | 6          | 104                   | 58    | 0   | 162        | 877        |
| 5:45 PM                                              | 12                                     | 359  | 143  | 514        | 0                                      | 243  | 26    | 269        | 0                     | 0    | 15    | 15         | 83                    | 45    | 0   | 128        | 926        |
| Total Volume                                         | 46                                     | 1412 | 653  | 2111       | 0                                      | 812  | 125   | 937        | 0                     | 0    | 35    | 35         | 387                   | 218   | 0   | 605        | 3688       |
| % App. Total                                         | 2.2                                    | 66.9 | 30.9 | 100        | 0.0                                    | 86.7 | 13.3  | 100        | 0.0                   | 0.0  | 100.0 | 100        | 64.0                  | 36.0  | 0.0 | 100        |            |
| PHF                                                  | 0.929                                  |      |      |            | 0.871                                  |      |       |            | 0.583                 |      |       |            | 0.879                 |       |     |            |            |
| Cars, PU, Vans                                       | 46                                     | 1401 | 652  | 2099       | 0                                      | 805  | 125   | 930        | 0                     | 0    | 35    | 35         | 386                   | 218   | 0   | 604        | 3668       |
| % Cars, PU, Vans                                     | 100.0                                  | 99.2 | 99.8 | 99.4       | 0.0                                    | 99.1 | 100.0 | 99.3       | 0.0                   | 0.0  | 100.0 | 100.0      | 99.7                  | 100.0 | 0.0 | 99.8       | 99.5       |
| Heavy Trucks                                         | 0                                      | 11   | 1    | 12         | 0                                      | 7    | 0     | 7          | 0                     | 0    | 0     | 0          | 1                     | 0     | 0   | 1          | 20         |
| %Heavy Trucks                                        | 0.0                                    | 0.8  | 0.2  | 0.6        | 0.0                                    | 0.9  | 0.0   | 0.7        | 0.0                   | 0.0  | 0.0   | 0.0        | 0.3                   | 0.0   | 0.0 | 0.2        | 0.5        |

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-9124-004

Day: Wednesday

City: Gainesville

Date: 2/22/2017

| AM                          |                          |         |         |                          |         |         |           |         |         |           |         |         |       |
|-----------------------------|--------------------------|---------|---------|--------------------------|---------|---------|-----------|---------|---------|-----------|---------|---------|-------|
| NS/EW Streets:              | Green St NE_Riverside Dr |         |         | Green St NE_Riverside Dr |         |         | Holly Dr  |         |         | Holly Dr  |         |         |       |
|                             | NORTHBOUND               |         |         | SOUTHBOUND               |         |         | EASTBOUND |         |         | WESTBOUND |         |         |       |
| LANES:                      | NL<br>1                  | NT<br>2 | NR<br>2 | SL<br>0                  | ST<br>2 | SR<br>0 | EL<br>0   | ET<br>1 | ER<br>0 | WL<br>0   | WT<br>2 | WR<br>0 | TOTAL |
| 7:00 AM                     | 0                        | 6       | 0       | 0                        | 5       | 0       | 0         | 0       | 0       | 0         | 0       | 0       | 11    |
| 7:15 AM                     | 0                        | 11      | 0       | 0                        | 3       | 0       | 0         | 0       | 0       | 1         | 0       | 0       | 15    |
| 7:30 AM                     | 0                        | 3       | 1       | 0                        | 3       | 0       | 0         | 0       | 0       | 2         | 0       | 0       | 9     |
| 7:45 AM                     | 0                        | 6       | 0       | 0                        | 1       | 0       | 0         | 0       | 0       | 0         | 0       | 0       | 7     |
| 8:00 AM                     | 0                        | 3       | 1       | 0                        | 3       | 0       | 0         | 0       | 0       | 1         | 0       | 0       | 8     |
| 8:15 AM                     | 0                        | 3       | 0       | 0                        | 7       | 0       | 0         | 0       | 0       | 0         | 0       | 0       | 10    |
| 8:30 AM                     | 0                        | 3       | 0       | 0                        | 3       | 0       | 0         | 0       | 0       | 0         | 0       | 0       | 6     |
| 8:45 AM                     | 0                        | 2       | 1       | 0                        | 2       | 0       | 0         | 0       | 0       | 1         | 1       | 0       | 7     |
| <b>TOTAL VOLUMES :</b>      | 0                        | 37      | 3       | 0                        | 27      | 0       | 0         | 0       | 0       | 5         | 1       | 0       | 73    |
| <b>APPROACH %'s :</b>       | 0.00%                    | 92.50%  | 7.50%   | 0.00%                    | 100.00% | 0.00%   | #DIV/0!   | #DIV/0! | #DIV/0! | 83.33%    | 16.67%  | 0.00%   |       |
| <b>PEAK HR START TIME :</b> | 730 AM                   |         |         |                          |         |         |           |         |         |           |         |         |       |
| <b>PEAK HR VOL :</b>        | 0                        | 15      | 2       | 0                        | 14      | 0       | 0         | 0       | 0       | 3         | 0       | 0       | 34    |
| <b>PEAK HR FACTOR :</b>     | 0.708                    |         |         | 0.500                    |         |         | 0.000     |         |         | 0.375     |         |         | 0.850 |

CONTROL : Signalized

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-9124-004

Day: Wednesday

City: Gainesville

Date: 2/22/2017

| PM                          |                          |         |         |                          |         |         |           |         |         |           |         |         |       |
|-----------------------------|--------------------------|---------|---------|--------------------------|---------|---------|-----------|---------|---------|-----------|---------|---------|-------|
| NS/EW Streets:              | Green St NE_Riverside Dr |         |         | Green St NE_Riverside Dr |         |         | Holly Dr  |         |         | Holly Dr  |         |         |       |
|                             | NORTHBOUND               |         |         | SOUTHBOUND               |         |         | EASTBOUND |         |         | WESTBOUND |         |         |       |
| LANES:                      | NL<br>1                  | NT<br>2 | NR<br>2 | SL<br>0                  | ST<br>2 | SR<br>0 | EL<br>0   | ET<br>1 | ER<br>0 | WL<br>0   | WT<br>2 | WR<br>0 | TOTAL |
| 4:00 PM                     | 0                        | 2       | 1       | 0                        | 6       | 0       | 0         | 0       | 0       | 1         | 0       | 0       | 10    |
| 4:15 PM                     | 0                        | 4       | 0       | 0                        | 5       | 0       | 0         | 0       | 0       | 1         | 0       | 0       | 10    |
| 4:30 PM                     | 0                        | 2       | 0       | 0                        | 5       | 0       | 0         | 0       | 0       | 0         | 0       | 0       | 7     |
| 4:45 PM                     | 0                        | 1       | 0       | 0                        | 1       | 0       | 0         | 0       | 0       | 0         | 0       | 0       | 2     |
| 5:00 PM                     | 0                        | 0       | 0       | 0                        | 0       | 0       | 0         | 0       | 0       | 1         | 0       | 0       | 1     |
| 5:15 PM                     | 0                        | 6       | 1       | 0                        | 1       | 0       | 0         | 0       | 0       | 0         | 0       | 0       | 8     |
| 5:30 PM                     | 0                        | 2       | 0       | 0                        | 2       | 0       | 0         | 0       | 0       | 0         | 0       | 0       | 4     |
| 5:45 PM                     | 0                        | 3       | 0       | 0                        | 4       | 0       | 0         | 0       | 0       | 0         | 0       | 0       | 7     |
| <b>TOTAL VOLUMES :</b>      | 0                        | 20      | 2       | 0                        | 24      | 0       | 0         | 0       | 0       | 3         | 0       | 0       | 49    |
| <b>APPROACH %'s :</b>       | 0.00%                    | 90.91%  | 9.09%   | 0.00%                    | 100.00% | 0.00%   | #DIV/0!   | #DIV/0! | #DIV/0! | 100.00%   | 0.00%   | 0.00%   |       |
| <b>PEAK HR START TIME :</b> | 500 PM                   |         |         |                          |         |         |           |         |         |           |         |         |       |
| <b>PEAK HR VOL :</b>        | 0                        | 11      | 1       | 0                        | 7       | 0       | 0         | 0       | 0       | 1         | 0       | 0       | 20    |
| <b>PEAK HR FACTOR :</b>     | 0.429                    |         |         | 0.438                    |         |         | 0.000     |         |         | 0.250     |         |         | 0.625 |

CONTROL : Signalized

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-9124-007

Day: Wednesday

City: Gainesville

Date: 2/22/2017

| AM                          |                       |            |          |                       |            |          |               |         |          |               |         |         |               |
|-----------------------------|-----------------------|------------|----------|-----------------------|------------|----------|---------------|---------|----------|---------------|---------|---------|---------------|
| NS/EW Streets:              | Green St_State Hwy 11 |            |          | Green St_State Hwy 11 |            |          | Ridgewood Ave |         |          | Ridgewood Ave |         |         |               |
|                             | NORTHBOUND            |            |          | SOUTHBOUND            |            |          | EASTBOUND     |         |          | WESTBOUND     |         |         |               |
| LANES:                      | NL<br>0               | NT<br>2    | NR<br>0  | SL<br>0               | ST<br>2    | SR<br>0  | EL<br>0       | ET<br>1 | ER<br>0  | WL<br>0       | WT<br>1 | WR<br>0 | TOTAL         |
| 7:00 AM                     | 0                     | 140        | 1        | 0                     | 316        | 3        | 26            | 0       | 4        | 1             | 0       | 0       | 491           |
| 7:15 AM                     | 2                     | 205        | 0        | 0                     | 371        | 5        | 39            | 0       | 5        | 0             | 1       | 0       | 628           |
| 7:30 AM                     | 0                     | 242        | 0        | 0                     | 511        | 12       | 41            | 1       | 6        | 1             | 0       | 1       | 815           |
| 7:45 AM                     | 5                     | 226        | 1        | 0                     | 459        | 15       | 39            | 2       | 9        | 1             | 1       | 1       | 759           |
| 8:00 AM                     | 6                     | 203        | 3        | 1                     | 420        | 16       | 30            | 2       | 5        | 3             | 4       | 0       | 693           |
| 8:15 AM                     | 3                     | 207        | 7        | 3                     | 408        | 20       | 21            | 0       | 2        | 1             | 1       | 0       | 673           |
| 8:30 AM                     | 5                     | 211        | 2        | 1                     | 342        | 14       | 23            | 0       | 4        | 0             | 1       | 0       | 603           |
| 8:45 AM                     | 3                     | 248        | 5        | 1                     | 371        | 11       | 19            | 0       | 4        | 1             | 0       | 0       | 663           |
| <b>TOTAL VOLUMES :</b>      | NL<br>24              | NT<br>1682 | NR<br>19 | SL<br>6               | ST<br>3198 | SR<br>96 | EL<br>238     | ET<br>5 | ER<br>39 | WL<br>8       | WT<br>8 | WR<br>2 | TOTAL<br>5325 |
| <b>APPROACH %'s :</b>       | 1.39%                 | 97.51%     | 1.10%    | 0.18%                 | 96.91%     | 2.91%    | 84.40%        | 1.77%   | 13.83%   | 44.44%        | 44.44%  | 11.11%  |               |
| <b>PEAK HR START TIME :</b> | 730 AM                |            |          |                       |            |          |               |         |          |               |         |         | <b>TOTAL</b>  |
| <b>PEAK HR VOL :</b>        | 14                    | 878        | 11       | 4                     | 1798       | 63       | 131           | 5       | 22       | 6             | 6       | 2       | 2940          |
| <b>PEAK HR FACTOR :</b>     | 0.933                 |            |          | 0.891                 |            |          | 0.790         |         |          | 0.500         |         |         | 0.902         |

CONTROL : Signalized



# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-9124-007

Day: Wednesday

City: Gainesville

Date: 2/22/2017

| PM                          |                       |            |          |                       |            |           |               |          |          |               |          |          |               |
|-----------------------------|-----------------------|------------|----------|-----------------------|------------|-----------|---------------|----------|----------|---------------|----------|----------|---------------|
| NS/EW Streets:              | Green St_State Hwy 11 |            |          | Green St_State Hwy 11 |            |           | Ridgewood Ave |          |          | Ridgewood Ave |          |          |               |
|                             | NORTHBOUND            |            |          | SOUTHBOUND            |            |           | EASTBOUND     |          |          | WESTBOUND     |          |          |               |
| LANES:                      | NL<br>0               | NT<br>2    | NR<br>0  | SL<br>0               | ST<br>2    | SR<br>0   | EL<br>0       | ET<br>1  | ER<br>0  | WL<br>0       | WT<br>1  | WR<br>0  | TOTAL         |
| 4:00 PM                     | 9                     | 362        | 1        | 1                     | 283        | 18        | 32            | 2        | 6        | 6             | 1        | 2        | 723           |
| 4:15 PM                     | 11                    | 413        | 4        | 0                     | 221        | 18        | 42            | 1        | 6        | 3             | 1        | 1        | 721           |
| 4:30 PM                     | 7                     | 410        | 1        | 0                     | 271        | 16        | 53            | 2        | 3        | 4             | 0        | 3        | 770           |
| 4:45 PM                     | 10                    | 447        | 2        | 0                     | 207        | 9         | 69            | 1        | 3        | 2             | 1        | 1        | 752           |
| 5:00 PM                     | 6                     | 500        | 3        | 0                     | 265        | 20        | 67            | 1        | 4        | 2             | 8        | 1        | 877           |
| 5:15 PM                     | 4                     | 448        | 1        | 0                     | 269        | 19        | 74            | 1        | 2        | 3             | 1        | 1        | 823           |
| 5:30 PM                     | 4                     | 464        | 4        | 0                     | 251        | 19        | 51            | 3        | 10       | 4             | 4        | 3        | 817           |
| 5:45 PM                     | 9                     | 437        | 2        | 0                     | 312        | 15        | 60            | 3        | 4        | 2             | 1        | 0        | 845           |
| <b>TOTAL VOLUMES :</b>      | NL<br>60              | NT<br>3481 | NR<br>18 | SL<br>1               | ST<br>2079 | SR<br>134 | EL<br>448     | ET<br>14 | ER<br>38 | WL<br>26      | WT<br>17 | WR<br>12 | TOTAL<br>6328 |
| <b>APPROACH %'s :</b>       | 1.69%                 | 97.81%     | 0.51%    | 0.05%                 | 93.90%     | 6.05%     | 89.60%        | 2.80%    | 7.60%    | 47.27%        | 30.91%   | 21.82%   |               |
| <b>PEAK HR START TIME :</b> | 500 PM                |            |          |                       |            |           |               |          |          |               |          |          | <b>TOTAL</b>  |
| <b>PEAK HR VOL :</b>        | 23                    | 1849       | 10       | 0                     | 1097       | 73        | 252           | 8        | 20       | 11            | 14       | 5        | 3362          |
| <b>PEAK HR FACTOR :</b>     | 0.924                 |            |          | 0.894                 |            |           | 0.909         |          |          | 0.682         |          |          | 0.958         |

CONTROL : Signalized

# ITM Peak Hour Summary

Prepared by:

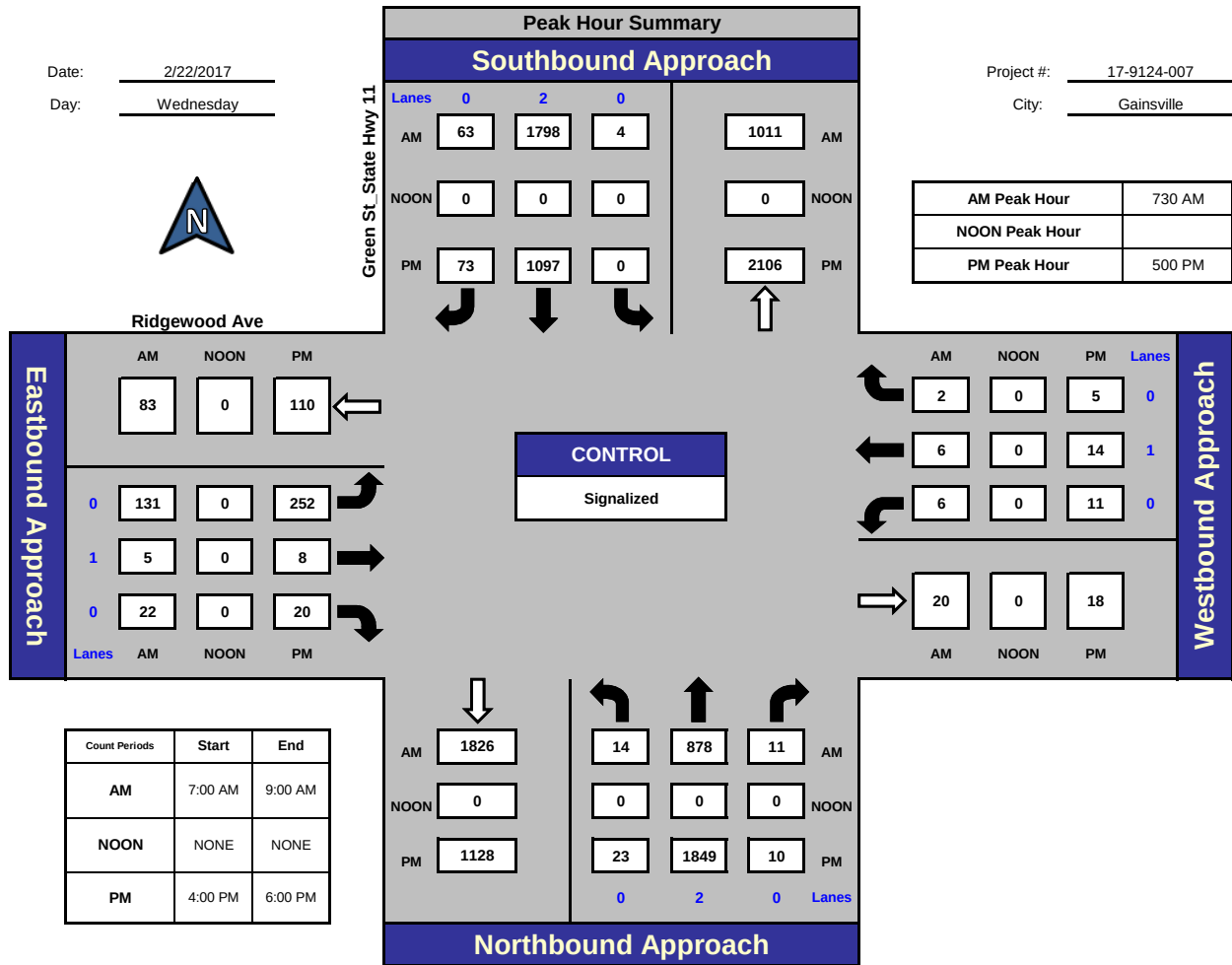


National Data & Surveying Services

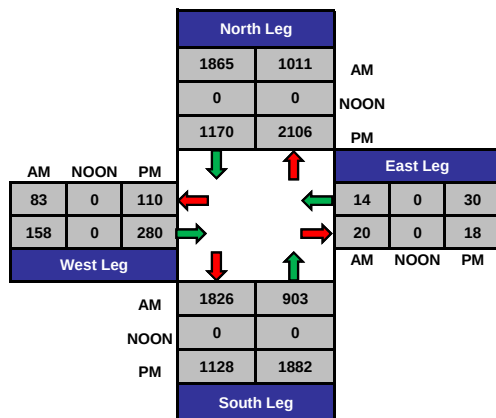
## Green St State Hwy 11 and Ridgewood Ave , Gainesville

Date: 2/22/2017  
Day: Wednesday

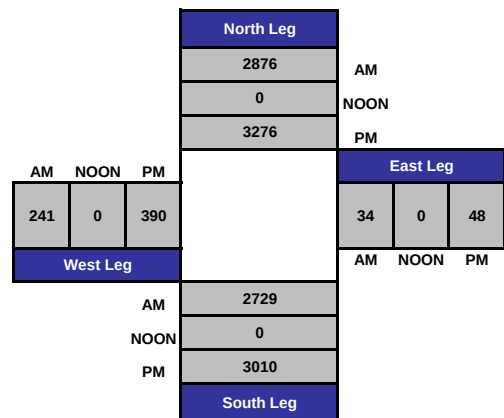
Project #: 17-9124-007  
City: Gainesville



### Total Ins & Outs



### Total Volume Per Leg



**PREPARED BY NATIONAL DATA & SURVEYING SERVICES**

PROJECT#: 17-9124-007  
 N/S Street: Green St\_State Hwy 11  
 E/W Street: Ridgewood Ave  
 DATE: 2/22/2017  
 CITY: Gainesville

DAY: Wednesday

**A M**

**PEDESTRIANS**

| T I M E       | NORTH LEG |          | SOUTH LEG |          | EAST LEG |          | WEST LEG |          |
|---------------|-----------|----------|-----------|----------|----------|----------|----------|----------|
|               | EB        | WB       | EB        | WB       | NB       | SB       | NB       | SB       |
| 7:00 AM       | 0         | 0        | 1         | 0        | 0        | 0        | 0        | 1        |
| 7:15 AM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 1        |
| 7:30 AM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 7:45 AM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 8:00 AM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 8:15 AM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 8:30 AM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 8:45 AM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| <b>TOTALS</b> | <b>0</b>  | <b>0</b> | <b>1</b>  | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>2</b> |

**BIKES**

| T I M E       | NB       |          |          | SB       |          |          | EB       |          |          | WB       |          |          |
|---------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|               | NL       | NT       | NR       | SL       | ST       | SR       | EL       | ET       | ER       | WL       | WT       | WR       |
| 7:00 AM       | 0        | 0        | 0        | 0        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 7:15 AM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 7:30 AM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 7:45 AM       | 0        | 0        | 0        | 0        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 8:00 AM       | 0        | 0        | 0        | 0        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 8:15 AM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 8:30 AM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 8:45 AM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| <b>TOTALS</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>3</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> |

**P M**

**PEDESTRIANS**

| T I M E       | NORTH LEG |          | SOUTH LEG |          | EAST LEG |          | WEST LEG |          |
|---------------|-----------|----------|-----------|----------|----------|----------|----------|----------|
|               | EB        | WB       | EB        | WB       | NB       | SB       | NB       | SB       |
| 4:00 PM       | 0         | 1        | 0         | 0        | 0        | 0        | 1        | 1        |
| 4:15 PM       | 0         | 0        | 2         | 0        | 2        | 0        | 1        | 0        |
| 4:30 PM       | 1         | 0        | 0         | 0        | 0        | 1        | 0        | 0        |
| 4:45 PM       | 0         | 0        | 0         | 0        | 1        | 0        | 0        | 0        |
| 5:00 PM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 1        |
| 5:15 PM       | 0         | 0        | 0         | 0        | 0        | 2        | 0        | 0        |
| 5:30 PM       | 0         | 0        | 0         | 0        | 0        | 1        | 0        | 0        |
| 5:45 PM       | 0         | 2        | 2         | 0        | 0        | 1        | 0        | 2        |
| <b>TOTALS</b> | <b>1</b>  | <b>3</b> | <b>4</b>  | <b>0</b> | <b>3</b> | <b>5</b> | <b>2</b> | <b>4</b> |

**BIKES**

| T I M E       | NB       |          |          | SB       |          |          | EB       |          |          | WB       |          |          |
|---------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|               | NL       | NT       | NR       | SL       | ST       | SR       | EL       | ET       | ER       | WL       | WT       | WR       |
| 4:00 PM       | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 0        | 0        | 0        | 0        |
| 4:15 PM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 4:30 PM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 4:45 PM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 5:00 PM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 5:15 PM       | 0        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 5:30 PM       | 0        | 0        | 0        | 0        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 5:45 PM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| <b>TOTALS</b> | <b>0</b> | <b>1</b> | <b>0</b> | <b>0</b> | <b>1</b> | <b>0</b> | <b>1</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> |

Project ID: 17-9124-007

Location: Green St State Hwy 11 &amp; Ridgewood Ave

City: Gainesville

Day: Wednesday

Date: 2/22/2017

| Peak Start Times |          |
|------------------|----------|
| AM               | 7:00 AM  |
| MD               | 12:00 AM |
| PM               | 4:00 PM  |

## Groups Printed - Cars, PU, Vans - Heavy Trucks

|                  | Green St State Hwy 11 Northbound |      |       |       |            | Green St State Hwy 11 Southbound |      |       |       |            | Ridgewood Ave Eastbound |       |       |       |            | Ridgewood Ave Westbound |       |       |       |            |            |
|------------------|----------------------------------|------|-------|-------|------------|----------------------------------|------|-------|-------|------------|-------------------------|-------|-------|-------|------------|-------------------------|-------|-------|-------|------------|------------|
| Start Time       | Left                             | Thru | Rgt   | Peds  | App. Total | Left                             | Thru | Rgt   | Peds  | App. Total | Left                    | Thru  | Rgt   | Peds  | App. Total | Left                    | Thru  | Rgt   | Peds  | App. Total | Int. Total |
| 7:00 AM          | 0                                | 140  | 1     | 1     | 141        | 0                                | 316  | 3     | 0     | 319        | 26                      | 0     | 4     | 1     | 30         | 1                       | 0     | 0     | 0     | 1          | 491        |
| 7:15 AM          | 2                                | 205  | 0     | 0     | 207        | 0                                | 371  | 5     | 0     | 376        | 39                      | 0     | 5     | 1     | 44         | 0                       | 1     | 0     | 0     | 1          | 628        |
| 7:30 AM          | 0                                | 242  | 0     | 0     | 242        | 0                                | 511  | 12    | 0     | 523        | 41                      | 1     | 6     | 0     | 48         | 1                       | 0     | 1     | 0     | 2          | 815        |
| 7:45 AM          | 5                                | 226  | 1     | 0     | 232        | 0                                | 459  | 15    | 0     | 474        | 39                      | 2     | 9     | 0     | 50         | 1                       | 1     | 1     | 0     | 3          | 759        |
| Total            | 7                                | 813  | 2     | 1     | 822        | 0                                | 1657 | 35    | 0     | 1692       | 145                     | 3     | 24    | 2     | 172        | 3                       | 2     | 2     | 0     | 7          | 2693       |
| 8:00 AM          | 6                                | 203  | 3     | 0     | 212        | 1                                | 420  | 16    | 0     | 437        | 30                      | 2     | 5     | 0     | 37         | 3                       | 4     | 0     | 0     | 7          | 693        |
| 8:15 AM          | 3                                | 207  | 7     | 0     | 217        | 3                                | 408  | 20    | 0     | 431        | 21                      | 0     | 2     | 0     | 23         | 1                       | 1     | 0     | 0     | 2          | 673        |
| 8:30 AM          | 5                                | 211  | 2     | 0     | 218        | 1                                | 342  | 14    | 0     | 357        | 23                      | 0     | 4     | 0     | 27         | 0                       | 1     | 0     | 0     | 1          | 603        |
| 8:45 AM          | 3                                | 248  | 5     | 0     | 256        | 1                                | 371  | 11    | 0     | 383        | 19                      | 0     | 4     | 0     | 23         | 1                       | 0     | 0     | 0     | 1          | 663        |
| Total            | 17                               | 869  | 17    | 0     | 903        | 6                                | 1541 | 61    | 0     | 1608       | 93                      | 2     | 15    | 0     | 110        | 5                       | 6     | 0     | 0     | 11         | 2632       |
| ***BREAK***      |                                  |      |       |       |            |                                  |      |       |       |            |                         |       |       |       |            |                         |       |       |       |            |            |
| 4:00 PM          | 9                                | 362  | 1     | 0     | 372        | 1                                | 283  | 18    | 1     | 302        | 32                      | 2     | 6     | 2     | 40         | 6                       | 1     | 2     | 0     | 9          | 723        |
| 4:15 PM          | 11                               | 413  | 4     | 2     | 428        | 0                                | 221  | 18    | 0     | 239        | 42                      | 1     | 6     | 1     | 49         | 3                       | 1     | 1     | 2     | 5          | 721        |
| 4:30 PM          | 7                                | 410  | 1     | 0     | 418        | 0                                | 271  | 16    | 1     | 287        | 53                      | 2     | 3     | 0     | 58         | 4                       | 0     | 3     | 1     | 7          | 770        |
| 4:45 PM          | 10                               | 447  | 2     | 0     | 459        | 0                                | 207  | 9     | 0     | 216        | 69                      | 1     | 3     | 0     | 73         | 2                       | 1     | 1     | 1     | 4          | 752        |
| Total            | 37                               | 1632 | 8     | 2     | 1677       | 1                                | 982  | 61    | 2     | 1044       | 196                     | 6     | 18    | 3     | 220        | 15                      | 3     | 7     | 4     | 25         | 2966       |
| 5:00 PM          | 6                                | 500  | 3     | 0     | 509        | 0                                | 265  | 20    | 0     | 285        | 67                      | 1     | 4     | 1     | 72         | 2                       | 8     | 1     | 0     | 11         | 877        |
| 5:15 PM          | 4                                | 448  | 1     | 0     | 453        | 0                                | 269  | 19    | 0     | 288        | 74                      | 1     | 2     | 0     | 77         | 3                       | 1     | 1     | 2     | 5          | 823        |
| 5:30 PM          | 4                                | 464  | 4     | 0     | 472        | 0                                | 251  | 19    | 0     | 270        | 51                      | 3     | 10    | 0     | 64         | 4                       | 4     | 3     | 1     | 11         | 817        |
| 5:45 PM          | 9                                | 437  | 2     | 2     | 448        | 0                                | 312  | 15    | 2     | 327        | 60                      | 3     | 4     | 2     | 67         | 2                       | 1     | 0     | 1     | 3          | 845        |
| Total            | 23                               | 1849 | 10    | 2     | 1882       | 0                                | 1097 | 73    | 2     | 1170       | 252                     | 8     | 20    | 3     | 280        | 11                      | 14    | 5     | 4     | 30         | 3362       |
| Grand Total      | 84                               | 5163 | 37    | 5     | 5284       | 7                                | 5277 | 230   | 4     | 5514       | 686                     | 19    | 77    | 8     | 782        | 34                      | 25    | 14    | 8     | 73         | 11653      |
| Apprch %         | 1.6                              | 97.7 | 0.7   | 0.1   |            | 0.1                              | 95.7 | 4.2   | 0.1   |            | 87.7                    | 2.4   | 9.8   | 1.0   |            | 46.6                    | 34.2  | 19.2  | 11.0  |            |            |
| Total %          | 0.7                              | 44.3 | 0.3   | 0.0   | 45.3       | 0.1                              | 45.3 | 2.0   | 0.0   | 47.3       | 5.9                     | 0.2   | 0.7   | 0.1   | 6.7        | 0.3                     | 0.2   | 0.1   | 0.1   | 0.6        |            |
| Cars, PU, Vans   | 84                               | 5102 | 37    | 5     | 5223       | 7                                | 5220 | 230   | 4     | 5457       | 686                     | 19    | 77    | 8     | 782        | 33                      | 25    | 14    | 8     | 72         | 11534      |
| % Cars, PU, Vans | 100.0                            | 98.8 | 100.0 | 100.0 | 98.8       | 100.0                            | 98.9 | 100.0 | 100.0 | 99.0       | 100.0                   | 100.0 | 100.0 | 100.0 | 100.0      | 97.1                    | 100.0 | 100.0 | 100.0 | 98.6       | 99.0       |
| Heavy Trucks     | 0                                | 61   | 0     |       | 61         | 0                                | 57   | 0     |       | 57         | 0                       | 0     | 0     |       | 0          | 1                       | 0     | 0     |       | 1          | 119        |
| %Heavy Trucks    | 0.0                              | 1.2  | 0.0   | 0.0   | 1.2        | 0.0                              | 1.1  | 0.0   | 0.0   | 1.0        | 0.0                     | 0.0   | 0.0   | 0.0   | 0.0        | 2.9                     | 0.0   | 0.0   | 0.0   | 1.4        | 1.0        |

Project ID: 17-9124-007

Location: Green St\_State Hwy 11 &amp; Ric

City: Gainesville

**PEAK HOURS**

Day: Wednesday

Date: 2/22/2017

**AM**

|                                                      | Green St_State Hwy 11<br>Northbound |      |       |            | Green St_State Hwy 11<br>Southbound |      |       |            | Ridgewood Ave<br>Eastbound |       |       |            | Ridgewood Ave<br>Westbound |       |       |            |            |
|------------------------------------------------------|-------------------------------------|------|-------|------------|-------------------------------------|------|-------|------------|----------------------------|-------|-------|------------|----------------------------|-------|-------|------------|------------|
| Start Time                                           | Left                                | Thru | Rgt   | App. Total | Left                                | Thru | Rgt   | App. Total | Left                       | Thru  | Rgt   | App. Total | Left                       | Thru  | Rgt   | App. Total | Int. Total |
| Peak Hour Analysis from 07:00 AM to 09:00 AM         |                                     |      |       |            |                                     |      |       |            |                            |       |       |            |                            |       |       |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM |                                     |      |       |            |                                     |      |       |            |                            |       |       |            |                            |       |       |            |            |
| 7:30 AM                                              | 0                                   | 242  | 0     | 242        | 0                                   | 511  | 12    | 523        | 41                         | 1     | 6     | 48         | 1                          | 0     | 1     | 2          | 815        |
| 7:45 AM                                              | 5                                   | 226  | 1     | 232        | 0                                   | 459  | 15    | 474        | 39                         | 2     | 9     | 50         | 1                          | 1     | 1     | 3          | 759        |
| 8:00 AM                                              | 6                                   | 203  | 3     | 212        | 1                                   | 420  | 16    | 437        | 30                         | 2     | 5     | 37         | 3                          | 4     | 0     | 7          | 693        |
| 8:15 AM                                              | 3                                   | 207  | 7     | 217        | 3                                   | 408  | 20    | 431        | 21                         | 0     | 2     | 23         | 1                          | 1     | 0     | 2          | 673        |
| Total Volume                                         | 14                                  | 878  | 11    | 903        | 4                                   | 1798 | 63    | 1865       | 131                        | 5     | 22    | 158        | 6                          | 6     | 2     | 14         | 2940       |
| % App. Total                                         | 1.6                                 | 97.2 | 1.2   | 100        | 0.2                                 | 96.4 | 3.4   | 100        | 82.9                       | 3.2   | 13.9  | 100        | 42.9                       | 42.9  | 14.3  | 100        |            |
| PHF                                                  | 0.933                               |      |       |            | 0.891                               |      |       |            | 0.790                      |       |       |            | 0.500                      |       |       |            |            |
| Cars, PU, Vans                                       | 14                                  | 862  | 11    | 887        | 4                                   | 1782 | 63    | 1849       | 131                        | 5     | 22    | 158        | 6                          | 6     | 2     | 14         | 2908       |
| % Cars, PU, Vans                                     | 100.0                               | 98.2 | 100.0 | 98.2       | 100.0                               | 99.1 | 100.0 | 99.1       | 100.0                      | 100.0 | 100.0 | 100.0      | 100.0                      | 100.0 | 100.0 | 100.0      | 98.9       |
| Heavy Trucks                                         | 0                                   | 16   | 0     | 16         | 0                                   | 16   | 0     | 16         | 0                          | 0     | 0     | 0          | 0                          | 0     | 0     | 0          | 32         |
| %Heavy Trucks                                        | 0.0                                 | 1.8  | 0.0   | 1.8        | 0.0                                 | 0.9  | 0.0   | 0.9        | 0.0                        | 0.0   | 0.0   | 0.0        | 0.0                        | 0.0   | 0.0   | 0.0        | 1.1        |

**PM**

|                                                      | Green St_State Hwy 11<br>Northbound |      |       |            | Green St_State Hwy 11<br>Southbound |      |       |            | Ridgewood Ave<br>Eastbound |       |       |            | Ridgewood Ave<br>Westbound |       |       |            |            |
|------------------------------------------------------|-------------------------------------|------|-------|------------|-------------------------------------|------|-------|------------|----------------------------|-------|-------|------------|----------------------------|-------|-------|------------|------------|
| Start Time                                           | Left                                | Thru | Rgt   | App. Total | Left                                | Thru | Rgt   | App. Total | Left                       | Thru  | Rgt   | App. Total | Left                       | Thru  | Rgt   | App. Total | Int. Total |
| Peak Hour Analysis from 04:00 PM to 06:00 PM         |                                     |      |       |            |                                     |      |       |            |                            |       |       |            |                            |       |       |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM |                                     |      |       |            |                                     |      |       |            |                            |       |       |            |                            |       |       |            |            |
| 5:00 PM                                              | 6                                   | 500  | 3     | 509        | 0                                   | 265  | 20    | 285        | 67                         | 1     | 4     | 72         | 2                          | 8     | 1     | 11         | 877        |
| 5:15 PM                                              | 4                                   | 448  | 1     | 453        | 0                                   | 269  | 19    | 288        | 74                         | 1     | 2     | 77         | 3                          | 1     | 1     | 5          | 823        |
| 5:30 PM                                              | 4                                   | 464  | 4     | 472        | 0                                   | 251  | 19    | 270        | 51                         | 3     | 10    | 64         | 4                          | 4     | 3     | 11         | 817        |
| 5:45 PM                                              | 9                                   | 437  | 2     | 448        | 0                                   | 312  | 15    | 327        | 60                         | 3     | 4     | 67         | 2                          | 1     | 0     | 3          | 845        |
| Total Volume                                         | 23                                  | 1849 | 10    | 1882       | 0                                   | 1097 | 73    | 1170       | 252                        | 8     | 20    | 280        | 11                         | 14    | 5     | 30         | 3362       |
| % App. Total                                         | 1.2                                 | 98.2 | 0.5   | 100        | 0.0                                 | 93.8 | 6.2   | 100        | 90.0                       | 2.9   | 7.1   | 100        | 36.7                       | 46.7  | 16.7  | 100        |            |
| PHF                                                  | 0.924                               |      |       |            | 0.894                               |      |       |            | 0.909                      |       |       |            | 0.682                      |       |       |            |            |
| Cars, PU, Vans                                       | 23                                  | 1837 | 10    | 1870       | 0                                   | 1091 | 73    | 1164       | 252                        | 8     | 20    | 280        | 11                         | 14    | 5     | 30         | 3344       |
| % Cars, PU, Vans                                     | 100.0                               | 99.4 | 100.0 | 99.4       | 0.0                                 | 99.5 | 100.0 | 99.5       | 100.0                      | 100.0 | 100.0 | 100.0      | 100.0                      | 100.0 | 100.0 | 100.0      | 99.5       |
| Heavy Trucks                                         | 0                                   | 12   | 0     | 12         | 0                                   | 6    | 0     | 6          | 0                          | 0     | 0     | 0          | 0                          | 0     | 0     | 0          | 18         |
| %Heavy Trucks                                        | 0.0                                 | 0.6  | 0.0   | 0.6        | 0.0                                 | 0.5  | 0.0   | 0.5        | 0.0                        | 0.0   | 0.0   | 0.0        | 0.0                        | 0.0   | 0.0   | 0.0        | 0.5        |

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-9124-007

Day: Wednesday

City: Gainesville

Date: 2/22/2017

| AM                          |                       |         |         |                       |         |         |               |         |         |               |         |         |       |
|-----------------------------|-----------------------|---------|---------|-----------------------|---------|---------|---------------|---------|---------|---------------|---------|---------|-------|
| NS/EW Streets:              | Green St_State Hwy 11 |         |         | Green St_State Hwy 11 |         |         | Ridgewood Ave |         |         | Ridgewood Ave |         |         |       |
|                             | NORTHBOUND            |         |         | SOUTHBOUND            |         |         | EASTBOUND     |         |         | WESTBOUND     |         |         |       |
| LANES:                      | NL<br>0               | NT<br>2 | NR<br>0 | SL<br>0               | ST<br>2 | SR<br>0 | EL<br>0       | ET<br>1 | ER<br>0 | WL<br>0       | WT<br>1 | WR<br>0 | TOTAL |
| 7:00 AM                     | 0                     | 5       | 0       | 0                     | 5       | 0       | 0             | 0       | 0       | 1             | 0       | 0       | 11    |
| 7:15 AM                     | 0                     | 12      | 0       | 0                     | 4       | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 16    |
| 7:30 AM                     | 0                     | 3       | 0       | 0                     | 5       | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 8     |
| 7:45 AM                     | 0                     | 6       | 0       | 0                     | 1       | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 7     |
| 8:00 AM                     | 0                     | 4       | 0       | 0                     | 4       | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 8     |
| 8:15 AM                     | 0                     | 3       | 0       | 0                     | 6       | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 9     |
| 8:30 AM                     | 0                     | 3       | 0       | 0                     | 4       | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 7     |
| 8:45 AM                     | 0                     | 3       | 0       | 0                     | 3       | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 6     |
| <b>TOTAL VOLUMES :</b>      | 0                     | 39      | 0       | 0                     | 32      | 0       | 0             | 0       | 0       | 1             | 0       | 0       | 72    |
| <b>APPROACH %'s :</b>       | 0.00%                 | 100.00% | 0.00%   | 0.00%                 | 100.00% | 0.00%   | #DIV/0!       | #DIV/0! | #DIV/0! | 100.00%       | 0.00%   | 0.00%   |       |
| <b>PEAK HR START TIME :</b> | 730 AM                |         |         |                       |         |         |               |         |         |               |         |         |       |
| <b>PEAK HR VOL :</b>        | 0                     | 16      | 0       | 0                     | 16      | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 32    |
| <b>PEAK HR FACTOR :</b>     | 0.667                 |         |         | 0.667                 |         |         | 0.000         |         |         | 0.000         |         |         | 0.889 |

CONTROL : Signalized

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-9124-007

Day: Wednesday

City: Gainesville

Date: 2/22/2017

| PM                          |                       |         |         |                       |         |         |               |         |         |               |         |         |              |
|-----------------------------|-----------------------|---------|---------|-----------------------|---------|---------|---------------|---------|---------|---------------|---------|---------|--------------|
| NS/EW Streets:              | Green St_State Hwy 11 |         |         | Green St_State Hwy 11 |         |         | Ridgewood Ave |         |         | Ridgewood Ave |         |         |              |
|                             | NORTHBOUND            |         |         | SOUTHBOUND            |         |         | EASTBOUND     |         |         | WESTBOUND     |         |         |              |
| LANES:                      | NL<br>0               | NT<br>2 | NR<br>0 | SL<br>0               | ST<br>2 | SR<br>0 | EL<br>0       | ET<br>1 | ER<br>0 | WL<br>0       | WT<br>1 | WR<br>0 | TOTAL        |
| 4:00 PM                     | 0                     | 3       | 0       | 0                     | 6       | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 9            |
| 4:15 PM                     | 0                     | 4       | 0       | 0                     | 7       | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 11           |
| 4:30 PM                     | 0                     | 2       | 0       | 0                     | 4       | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 6            |
| 4:45 PM                     | 0                     | 1       | 0       | 0                     | 2       | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 3            |
| 5:00 PM                     | 0                     | 0       | 0       | 0                     | 1       | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 1            |
| 5:15 PM                     | 0                     | 7       | 0       | 0                     | 1       | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 8            |
| 5:30 PM                     | 0                     | 2       | 0       | 0                     | 2       | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 4            |
| 5:45 PM                     | 0                     | 3       | 0       | 0                     | 2       | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 5            |
| <b>TOTAL VOLUMES :</b>      | 0                     | 22      | 0       | 0                     | 25      | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 47           |
| <b>APPROACH %'s :</b>       | 0.00%                 | 100.00% | 0.00%   | 0.00%                 | 100.00% | 0.00%   | #DIV/0!       | #DIV/0! | #DIV/0! | #DIV/0!       | #DIV/0! | #DIV/0! |              |
| <b>PEAK HR START TIME :</b> | 500 PM                |         |         |                       |         |         |               |         |         |               |         |         | <b>TOTAL</b> |
| <b>PEAK HR VOL :</b>        | 0                     | 12      | 0       | 0                     | 6       | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 18           |
| <b>PEAK HR FACTOR :</b>     | 0.429                 |         |         | 0.750                 |         |         | 0.000         |         |         | 0.000         |         |         | 0.563        |

CONTROL : Signalized

## Appendix B

### Intersection Analysis Methodology



# Intersection Analysis Methodology

The methodology used for evaluating traffic operations at intersections is presented in the Transportation Research Board’s *Highway Capacity Manual*, 2010 edition (HCM 2010). Synchro 8 software, which emulates the HCM 2010 methodology, was used for all analyses. The following is an overview of the methodology employed for the analysis of signalized intersections and stop-sign controlled (unsignalized) intersections.

## Signalized Intersections

The criteria for evaluating signalized intersections are capacity and level of service. The capacity analysis of an intersection compares the volume of traffic using the various lane groups at the intersection to the capacity of those lane groups. This produces a volume-to-capacity (v/c) ratio for each lane group. A v/c ratio greater than 1.0 indicates that the volume of traffic has exceeded the capacity available and indicates a temporary excess of demand. The HCM 2010 methodology computes a critical v/c ratio for an intersection based on the critical lane groups or approaches. This critical v/c ratio is an indication of overall intersection sufficiency.

Level of service for a signalized intersection is defined in terms of control delay per vehicle. For signalized intersections, a composite intersection level of service is determined. The thresholds for each level of service are higher for signalized intersections than for unsignalized intersections. This is attributable to a variety of factors including expectation and acceptance of higher delays at signals, and the fact that drivers can relax when waiting at a signal as opposed to having to remain attentive as they proceed through the unsignalized intersection. The level of service criteria for signalized intersections are shown in Table A.

**Table A – Level of Service Criteria for Signalized Intersections**

| Control Delay (s/veh) | Level of Service by Volume-to-Capacity Ratio |      |
|-----------------------|----------------------------------------------|------|
|                       | ≤1.0                                         | >1.0 |
| ≤ 10                  | A                                            | F    |
| > 10 and ≤ 20         | B                                            | F    |
| > 20 and ≤ 35         | C                                            | F    |
| > 35 and ≤ 55         | D                                            | F    |
| > 55 and ≤ 80         | E                                            | F    |
| > 80                  | F                                            | F    |

Source: *Highway Capacity Manual 2010*

## Unsignalized Intersections

The operations at an unsignalized intersection are defined in terms of levels of service. Level of service (LOS) is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. Level of service for an unsignalized intersection is defined in terms of control delay per vehicle. Control delay is that portion of delay attributable to the control device and includes initial deceleration delay, queue move-up time, stopped delay,

and final acceleration delay. The delays at unsignalized intersections are based on gap acceptance theory, factoring in availability of gaps, usefulness of the gaps, and the priority of right-of-way given to each traffic stream.

Levels of service are assigned letters A through F. LOS A indicates operations with very low control delay while LOS F describes operations with high control delay. LOS F is considered to be unacceptable by most drivers, while LOS E is typically considered to be the limit of acceptable delay. The level of service criteria for unsignalized intersections are presented in Table B.

**Table B – Level of Service Criteria for Unsignalized Intersections**

| Control Delay (s/veh) | Level of Service by Volume-to-Capacity Ratio |      |
|-----------------------|----------------------------------------------|------|
|                       | ≤1.0                                         | >1.0 |
| 0 – 10                | A                                            | F    |
| > 10 and ≤ 15         | B                                            | F    |
| > 15 and ≤ 25         | C                                            | F    |
| > 25 and ≤ 35         | D                                            | F    |
| > 35 and ≤ 50         | E                                            | F    |
| > 50                  | F                                            | F    |

*Source: Highway Capacity Manual 2010*

## Appendix C

### Existing Intersection Operational Analysis

Thompson Bridge / Enota Convenience  
1: Thompson Bridge & Walmart/Taco Bell

existing a.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |
| Volume (vph)               | 38                                                                                | 0                                                                                 | 64                                                                                | 3                                                                                 | 1                                                                                 | 4                                                                                 | 52                                                                                  | 881                                                                                 | 1                                                                                   | 6                                                                                   | 1877                                                                                | 80                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 50                                                                                |                                                                                   | 0                                                                                 | 50                                                                                |                                                                                   | 0                                                                                 | 200                                                                                 |                                                                                     | 100                                                                                 | 200                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                  |                                                                                     |                                                                                     | 25                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.871                                                                             |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     | 0.994                                                                               |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1787                                                                              | 1599                                                                              | 0                                                                                 | 1787                                                                              | 1639                                                                              | 0                                                                                 | 1787                                                                                | 3539                                                                                | 1599                                                                                | 1787                                                                                | 3519                                                                                | 0                                                                                   |
| Flt Permitted              | 0.753                                                                             |                                                                                   |                                                                                   | 0.538                                                                             |                                                                                   |                                                                                   | 0.056                                                                               |                                                                                     |                                                                                     | 0.304                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1417                                                                              | 1599                                                                              | 0                                                                                 | 1012                                                                              | 1639                                                                              | 0                                                                                 | 105                                                                                 | 3539                                                                                | 1599                                                                                | 572                                                                                 | 3519                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 62                                                                                |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                     |                                                                                     | 34                                                                                  |                                                                                     |                                                                                     | 8                                                                                   |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 30                                                                                  |                                                                                     |                                                                                     |                                                                                     | 30                                                                                  |
| Link Distance (ft)         |                                                                                   | 300                                                                               |                                                                                   |                                                                                   | 195                                                                               |                                                                                   |                                                                                     | 1235                                                                                |                                                                                     |                                                                                     |                                                                                     | 500                                                                                 |
| Travel Time (s)            |                                                                                   | 6.8                                                                               |                                                                                   |                                                                                   | 4.4                                                                               |                                                                                   |                                                                                     | 28.1                                                                                |                                                                                     |                                                                                     |                                                                                     | 11.4                                                                                |
| Peak Hour Factor           | 0.85                                                                              | 0.85                                                                              | 0.85                                                                              | 0.67                                                                              | 0.67                                                                              | 0.67                                                                              | 0.94                                                                                | 0.94                                                                                | 0.94                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                  | 2%                                                                                  | 1%                                                                                  | 1%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 45                                                                                | 0                                                                                 | 75                                                                                | 4                                                                                 | 1                                                                                 | 6                                                                                 | 55                                                                                  | 937                                                                                 | 1                                                                                   | 7                                                                                   | 2086                                                                                | 89                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 45                                                                                | 75                                                                                | 0                                                                                 | 4                                                                                 | 7                                                                                 | 0                                                                                 | 55                                                                                  | 937                                                                                 | 1                                                                                   | 7                                                                                   | 2175                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     |                                                                                     | 12                                                                                  |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     |                                                                                     | 0                                                                                   |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     |                                                                                     | 16                                                                                  |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                  | 100                                                                                 | 20                                                                                  | 20                                                                                  |                                                                                     | 100                                                                                 |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                  | 6                                                                                   | 20                                                                                  | 20                                                                                  |                                                                                     | 6                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |
| Detector 2 Position(ft)    |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                     | 94                                                                                  |                                                                                     |                                                                                     |                                                                                     | 94                                                                                  |
| Detector 2 Size(ft)        |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               |                                                                                     | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   | 6                                                                                   |                                                                                     |                                                                                     |

Thompson Bridge / Enota Convenience  
1: Thompson Bridge & Walmart/Taco Bell

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|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Detector Phase          | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   | 2                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              |                                                                                   | 20.0                                                                              | 20.0                                                                              |                                                                                   | 8.0                                                                                | 20.0                                                                                | 20.0                                                                                | 8.0                                                                                 | 20.0                                                                                |                                                                                     |
| Total Split (s)         | 20.0                                                                              | 20.0                                                                              |                                                                                   | 20.0                                                                              | 20.0                                                                              |                                                                                   | 12.0                                                                               | 132.0                                                                               | 132.0                                                                               | 8.0                                                                                 | 128.0                                                                               |                                                                                     |
| Total Split (%)         | 12.5%                                                                             | 12.5%                                                                             |                                                                                   | 12.5%                                                                             | 12.5%                                                                             |                                                                                   | 7.5%                                                                               | 82.5%                                                                               | 82.5%                                                                               | 5.0%                                                                                | 80.0%                                                                               |                                                                                     |
| Maximum Green (s)       | 16.0                                                                              | 16.0                                                                              |                                                                                   | 16.0                                                                              | 16.0                                                                              |                                                                                   | 8.0                                                                                | 128.0                                                                               | 128.0                                                                               | 4.0                                                                                 | 124.0                                                                               |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                                | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                                | 0.5                                                                                 | 0.5                                                                                 | 0.5                                                                                 | 0.5                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                                | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                               | C-Max                                                                               | C-Max                                                                               | None                                                                                | C-Max                                                                               |                                                                                     |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                              | 11.0                                                                              |                                                                                   |                                                                                    | 11.0                                                                                | 11.0                                                                                |                                                                                     | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |
| Act Effect Green (s)    | 10.4                                                                              | 10.4                                                                              |                                                                                   | 10.4                                                                              | 10.4                                                                              |                                                                                   | 141.4                                                                              | 139.8                                                                               | 139.8                                                                               | 137.4                                                                               | 133.1                                                                               |                                                                                     |
| Actuated g/C Ratio      | 0.06                                                                              | 0.06                                                                              |                                                                                   | 0.06                                                                              | 0.06                                                                              |                                                                                   | 0.88                                                                               | 0.87                                                                                | 0.87                                                                                | 0.86                                                                                | 0.83                                                                                |                                                                                     |
| v/c Ratio               | 0.49                                                                              | 0.46                                                                              |                                                                                   | 0.06                                                                              | 0.06                                                                              |                                                                                   | 0.35                                                                               | 0.30                                                                                | 0.00                                                                                | 0.01                                                                                | 0.74                                                                                |                                                                                     |
| Control Delay           | 88.6                                                                              | 30.3                                                                              |                                                                                   | 69.7                                                                              | 40.8                                                                              |                                                                                   | 16.2                                                                               | 2.1                                                                                 | 0.0                                                                                 | 1.7                                                                                 | 8.9                                                                                 |                                                                                     |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Delay             | 88.6                                                                              | 30.3                                                                              |                                                                                   | 69.7                                                                              | 40.8                                                                              |                                                                                   | 16.2                                                                               | 2.1                                                                                 | 0.0                                                                                 | 1.7                                                                                 | 8.9                                                                                 |                                                                                     |
| LOS                     | F                                                                                 | C                                                                                 |                                                                                   | E                                                                                 | D                                                                                 |                                                                                   | B                                                                                  | A                                                                                   | A                                                                                   | A                                                                                   | A                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   | 52.2                                                                              |                                                                                   |                                                                                   | 51.3                                                                              |                                                                                   |                                                                                    | 2.8                                                                                 |                                                                                     |                                                                                     | 8.9                                                                                 |                                                                                     |
| Approach LOS            |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 8.8

Intersection LOS: A

Intersection Capacity Utilization 69.9%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: Thompson Bridge & Walmart/Taco Bell

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
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| 8 s                                                                                 | 132 s                                                                               | 20 s                                                                                | 12 s                                                                                | 128 s                                                                               | 20 s                                                                                | 12 s                                                                                | 128 s                                                                               | 20 s                                                                                | 12 s                                                                                  | 128 s                                                                                 | 20 s                                                                                  | 12 s                                                                                  | 128 s                                                                                 | 20 s                                                                                  |

# Thompson Bridge / Enota Convenience

## 2: Thompson Bridge & Enota

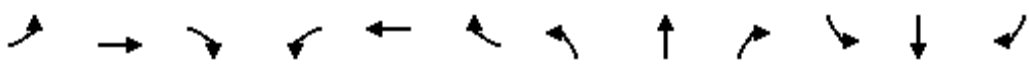
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|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |  |  |  |  |  |  |  |
| Volume (vph)               | 53                                                                                | 51                                                                                | 29                                                                                | 45                                                                                | 27                                                                                | 167                                                                               | 17                                                                                 | 734                                                                                 | 26                                                                                  | 313                                                                                 | 1604                                                                                | 32                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                               | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 300                                                                               |                                                                                   | 0                                                                                 | 200                                                                               |                                                                                   | 200                                                                               | 300                                                                                |                                                                                     | 0                                                                                   | 300                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                 |                                                                                     |                                                                                     | 25                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.945                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                    | 0.995                                                                               |                                                                                     |                                                                                     | 0.997                                                                               |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1805                                                                              | 1796                                                                              | 0                                                                                 | 1787                                                                              | 1900                                                                              | 1599                                                                              | 1805                                                                               | 3523                                                                                | 0                                                                                   | 1787                                                                                | 3530                                                                                | 0                                                                                   |
| Flt Permitted              | 0.548                                                                             |                                                                                   |                                                                                   | 0.702                                                                             |                                                                                   |                                                                                   | 0.096                                                                              |                                                                                     |                                                                                     | 0.307                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1041                                                                              | 1796                                                                              | 0                                                                                 | 1321                                                                              | 1900                                                                              | 1599                                                                              | 182                                                                                | 3523                                                                                | 0                                                                                   | 578                                                                                 | 3530                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 16                                                                                |                                                                                   |                                                                                   |                                                                                   | 188                                                                               |                                                                                    | 3                                                                                   |                                                                                     |                                                                                     | 3                                                                                   |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 30                                                                                  |                                                                                     |                                                                                     | 30                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 160                                                                               |                                                                                   |                                                                                   | 1380                                                                              |                                                                                   |                                                                                    | 173                                                                                 |                                                                                     |                                                                                     | 1235                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 3.6                                                                               |                                                                                   |                                                                                   | 31.4                                                                              |                                                                                   |                                                                                    | 3.9                                                                                 |                                                                                     |                                                                                     | 28.1                                                                                |                                                                                     |
| Peak Hour Factor           | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.94                                                                               | 0.94                                                                                | 0.94                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 1%                                                                                | 0%                                                                                | 1%                                                                                | 0%                                                                                 | 2%                                                                                  | 1%                                                                                  | 1%                                                                                  | 2%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 56                                                                                | 54                                                                                | 31                                                                                | 51                                                                                | 30                                                                                | 188                                                                               | 18                                                                                 | 781                                                                                 | 28                                                                                  | 348                                                                                 | 1782                                                                                | 36                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 56                                                                                | 85                                                                                | 0                                                                                 | 51                                                                                | 30                                                                                | 188                                                                               | 18                                                                                 | 809                                                                                 | 0                                                                                   | 348                                                                                 | 1818                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                               | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                    | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                    | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                 |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                | 100                                                                               | 20                                                                                | 20                                                                                 | 100                                                                                 |                                                                                     | 20                                                                                  | 100                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                | 6                                                                                 | 20                                                                                | 20                                                                                 | 6                                                                                   |                                                                                     | 20                                                                                  | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(ft)    |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                    | 94                                                                                  |                                                                                     |                                                                                     | 94                                                                                  |                                                                                     |
| Detector 2 Size(ft)        |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                    | 6                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | pm+pt                                                                             | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                              | NA                                                                                  |                                                                                     | pm+pt                                                                               | NA                                                                                  |                                                                                     |
| Protected Phases           | 7                                                                                 | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 8                                                                                 | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |

# Thompson Bridge / Enota Convenience

## 2: Thompson Bridge & Enota

existing a.m.

|                         |  |       |     |       |       |       |       |       |     |       |       |     |
|-------------------------|------------------------------------------------------------------------------------|-------|-----|-------|-------|-------|-------|-------|-----|-------|-------|-----|
| Lane Group              | EBL                                                                                | EBT   | EBR | WBL   | WBT   | WBR   | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
| Detector Phase          | 7                                                                                  | 4     |     | 8     | 8     | 8     | 5     | 2     |     | 1     | 6     |     |
| Switch Phase            |                                                                                    |       |     |       |       |       |       |       |     |       |       |     |
| Minimum Initial (s)     | 4.0                                                                                | 4.0   |     | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0   | 4.0   |     |
| Minimum Split (s)       | 8.0                                                                                | 20.0  |     | 20.0  | 20.0  | 20.0  | 8.0   | 20.0  |     | 8.0   | 20.0  |     |
| Total Split (s)         | 9.0                                                                                | 35.0  |     | 26.0  | 26.0  | 26.0  | 8.0   | 84.0  |     | 41.0  | 117.0 |     |
| Total Split (%)         | 5.6%                                                                               | 21.9% |     | 16.3% | 16.3% | 16.3% | 5.0%  | 52.5% |     | 25.6% | 73.1% |     |
| Maximum Green (s)       | 5.0                                                                                | 31.0  |     | 22.0  | 22.0  | 22.0  | 4.0   | 80.0  |     | 37.0  | 113.0 |     |
| Yellow Time (s)         | 3.5                                                                                | 3.5   |     | 3.5   | 3.5   | 3.5   | 3.5   | 3.5   |     | 3.5   | 3.5   |     |
| All-Red Time (s)        | 0.5                                                                                | 0.5   |     | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   |     | 0.5   | 0.5   |     |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Lost Time (s)     | 4.0                                                                                | 4.0   |     | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0   | 4.0   |     |
| Lead/Lag                | Lead                                                                               |       |     | Lag   |       |       | Lead  |       | Lag | Lead  |       | Lag |
| Lead-Lag Optimize?      | Yes                                                                                |       |     | Yes   |       |       | Yes   |       | Yes | Yes   |       | Yes |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode             | None                                                                               | None  |     | None  | None  | None  | None  | C-Max |     | None  | C-Max |     |
| Walk Time (s)           |                                                                                    | 5.0   |     | 5.0   | 5.0   | 5.0   |       | 5.0   |     |       | 5.0   |     |
| Flash Dont Walk (s)     |                                                                                    | 11.0  |     | 11.0  | 11.0  | 11.0  |       | 11.0  |     |       | 11.0  |     |
| Pedestrian Calls (#/hr) |                                                                                    | 0     |     | 0     | 0     | 0     |       | 0     |     |       | 0     |     |
| Act Effect Green (s)    | 18.8                                                                               | 18.8  |     | 11.6  | 11.6  | 11.6  | 122.6 | 116.8 |     | 133.2 | 127.2 |     |
| Actuated g/C Ratio      | 0.12                                                                               | 0.12  |     | 0.07  | 0.07  | 0.07  | 0.77  | 0.73  |     | 0.83  | 0.80  |     |
| v/c Ratio               | 0.38                                                                               | 0.38  |     | 0.54  | 0.22  | 0.65  | 0.09  | 0.31  |     | 0.61  | 0.65  |     |
| Control Delay           | 69.5                                                                               | 55.6  |     | 90.6  | 71.9  | 19.3  | 4.7   | 8.9   |     | 8.0   | 6.1   |     |
| Queue Delay             | 0.0                                                                                | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0   | 0.1   |     |
| Total Delay             | 69.5                                                                               | 55.6  |     | 90.6  | 71.9  | 19.3  | 4.7   | 8.9   |     | 8.0   | 6.1   |     |
| LOS                     | E                                                                                  | E     |     | F     | E     | B     | A     | A     |     | A     | A     |     |
| Approach Delay          |                                                                                    | 61.1  |     |       | 38.7  |       |       | 8.8   |     |       | 6.4   |     |
| Approach LOS            |                                                                                    | E     |     |       | D     |       |       | A     |     |       | A     |     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 41 (26%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 11.8

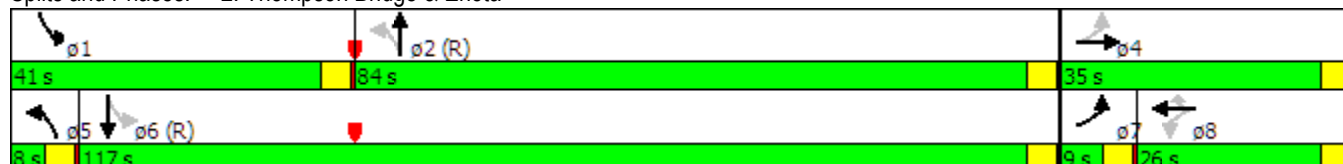
Intersection LOS: B

Intersection Capacity Utilization 68.3%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 2: Thompson Bridge & Enota



Thompson Bridge / Enota Convenience  
3: Riverside & Enota

existing a.m.

| Intersection              |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Intersection Delay, s/veh | 22.1 |      |      |      |      |      |      |      |      |      |      |      |
| Intersection LOS          | C    |      |      |      |      |      |      |      |      |      |      |      |
| Movement                  | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
| Vol, veh/h                | 0    | 9    | 305  | 7    | 0    | 45   | 200  | 40   | 0    | 9    | 55   | 65   |
| Peak Hour Factor          | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.75 | 0.75 | 0.75 | 0.92 | 0.60 | 0.60 | 0.60 |
| Heavy Vehicles, %         | 2    | 1    | 1    | 1    | 2    | 1    | 1    | 1    | 2    | 1    | 1    | 1    |
| Mvmt Flow                 | 0    | 10   | 332  | 8    | 0    | 60   | 267  | 53   | 0    | 15   | 92   | 108  |
| Number of Lanes           | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB | NB   |
|----------------------------|------|----|------|
| Opposing Approach          | WB   | EB | SB   |
| Opposing Lanes             | 1    | 1  | 1    |
| Conflicting Approach Left  | SB   | NB | EB   |
| Conflicting Lanes Left     | 1    | 1  | 1    |
| Conflicting Approach Right | NB   | SB | WB   |
| Conflicting Lanes Right    | 1    | 1  | 1    |
| HCM Control Delay          | 22.7 | 25 | 15.5 |
| HCM LOS                    | C    | C  | C    |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 7%    | 3%    | 16%   | 50%   |
| Vol Thru, %            | 43%   | 95%   | 70%   | 44%   |
| Vol Right, %           | 50%   | 2%    | 14%   | 6%    |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 129   | 321   | 285   | 275   |
| LT Vol                 | 9     | 9     | 45    | 137   |
| Through Vol            | 55    | 305   | 200   | 122   |
| RT Vol                 | 65    | 7     | 40    | 16    |
| Lane Flow Rate         | 215   | 349   | 380   | 327   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.427 | 0.667 | 0.714 | 0.646 |
| Departure Headway (Hd) | 7.148 | 6.881 | 6.761 | 7.108 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 501   | 523   | 532   | 507   |
| Service Time           | 5.22  | 4.94  | 4.82  | 5.17  |
| HCM Lane V/C Ratio     | 0.429 | 0.667 | 0.714 | 0.645 |
| HCM Control Delay      | 15.5  | 22.7  | 25    | 22.3  |
| HCM Lane LOS           | C     | C     | C     | C     |
| HCM 95th-tile Q        | 2.1   | 4.9   | 5.7   | 4.5   |



Thompson Bridge / Enota Convenience  
3: Riverside & Enota

existing a.m.

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Intersection

Intersection Delay, s/veh

Intersection LOS

| Movement          | SBU  | SBL  | SBT  | SBR  |
|-------------------|------|------|------|------|
| Vol, veh/h        | 0    | 137  | 122  | 16   |
| Peak Hour Factor  | 0.92 | 0.84 | 0.84 | 0.84 |
| Heavy Vehicles, % | 2    | 1    | 1    | 1    |
| Mvmt Flow         | 0    | 163  | 145  | 19   |
| Number of Lanes   | 0    | 0    | 1    | 0    |

Approach SB

|                            |      |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 22.3 |
| HCM LOS                    | C    |

Lane

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## Thompson Bridge / Enota Convenience

## 4: GA 11 Bus &amp; South Enota

existing a.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | NBL                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                               | SBR                                                                               | SEL                                                                                | SET                                                                                 | SER                                                                                 | NWL                                                                                 | NWT                                                                                 | NWR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |  |  |  |
| Volume (vph)               | 12                                                                                | 448                                                                               | 114                                                                               | 245                                                                               | 852                                                                               | 171                                                                               | 272                                                                                | 254                                                                                 | 34                                                                                  | 81                                                                                  | 127                                                                                 | 86                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                               | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 200                                                                               |                                                                                   | 0                                                                                 | 200                                                                               |                                                                                   | 0                                                                                 | 300                                                                                |                                                                                     | 0                                                                                   | 400                                                                                 |                                                                                     | 400                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                 |                                                                                     |                                                                                     | 25                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.970                                                                             |                                                                                   |                                                                                   | 0.975                                                                             |                                                                                   |                                                                                    | 0.982                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1787                                                                              | 1810                                                                              | 0                                                                                 | 1787                                                                              | 1819                                                                              | 0                                                                                 | 1787                                                                               | 1847                                                                                | 0                                                                                   | 1787                                                                                | 1881                                                                                | 1599                                                                                |
| Flt Permitted              | 0.064                                                                             |                                                                                   |                                                                                   | 0.248                                                                             |                                                                                   |                                                                                   | 0.226                                                                              |                                                                                     |                                                                                     | 0.366                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 120                                                                               | 1810                                                                              | 0                                                                                 | 467                                                                               | 1819                                                                              | 0                                                                                 | 425                                                                                | 1847                                                                                | 0                                                                                   | 689                                                                                 | 1881                                                                                | 1599                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 11                                                                                |                                                                                   |                                                                                   | 13                                                                                |                                                                                   |                                                                                    | 4                                                                                   |                                                                                     |                                                                                     |                                                                                     | 116                                                                                 |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 30                                                                                  |                                                                                     |                                                                                     |                                                                                     | 30                                                                                  |
| Link Distance (ft)         |                                                                                   | 494                                                                               |                                                                                   |                                                                                   | 509                                                                               |                                                                                   |                                                                                    | 1007                                                                                |                                                                                     |                                                                                     |                                                                                     | 495                                                                                 |
| Travel Time (s)            |                                                                                   | 11.2                                                                              |                                                                                   |                                                                                   | 11.6                                                                              |                                                                                   |                                                                                    | 22.9                                                                                |                                                                                     |                                                                                     |                                                                                     | 11.3                                                                                |
| Peak Hour Factor           | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.80                                                                               | 0.80                                                                                | 0.80                                                                                | 0.88                                                                                | 0.88                                                                                | 0.88                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 2%                                                                                | 1%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                | 1%                                                                                 | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 13                                                                                | 487                                                                               | 124                                                                               | 266                                                                               | 926                                                                               | 186                                                                               | 340                                                                                | 318                                                                                 | 42                                                                                  | 92                                                                                  | 144                                                                                 | 98                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 13                                                                                | 611                                                                               | 0                                                                                 | 266                                                                               | 1112                                                                              | 0                                                                                 | 340                                                                                | 360                                                                                 | 0                                                                                   | 92                                                                                  | 144                                                                                 | 98                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                               | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                    | 12                                                                                  |                                                                                     |                                                                                     |                                                                                     | 12                                                                                  |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     |                                                                                     | 0                                                                                   |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                    | 16                                                                                  |                                                                                     |                                                                                     |                                                                                     | 16                                                                                  |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                 |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                | Right                                                                               |
| Leading Detector (ft)      | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                 | 100                                                                                 |                                                                                     | 20                                                                                  | 100                                                                                 | 20                                                                                  |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                 | 6                                                                                   |                                                                                     | 20                                                                                  | 6                                                                                   | 20                                                                                  |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(ft)    |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                    | 94                                                                                  |                                                                                     |                                                                                     |                                                                                     | 94                                                                                  |
| Detector 2 Size(ft)        |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                    | 6                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                             | NA                                                                                |                                                                                   | pm+pt                                                                              | NA                                                                                  |                                                                                     | pm+pt                                                                               | NA                                                                                  | Free                                                                                |
| Protected Phases           |                                                                                   | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 |                                                                                   | 7                                                                                  | 4                                                                                   |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     |
| Permitted Phases           | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 4                                                                                  |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     | Free                                                                                |

# Thompson Bridge / Enota Convenience

## 4: GA 11 Bus & South Enota

existing a.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | NBL                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                               | SBR                                                                               | SEL                                                                                | SET                                                                                 | SER                                                                                 | NWL                                                                                 | NWT                                                                                 | NWR                                                                                 |
| Detector Phase          | 2                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 |                                                                                   | 7                                                                                  | 4                                                                                   |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              |                                                                                   | 8.0                                                                               | 20.0                                                                              |                                                                                   | 8.0                                                                                | 20.0                                                                                |                                                                                     | 8.0                                                                                 | 20.0                                                                                |                                                                                     |
| Total Split (s)         | 77.0                                                                              | 77.0                                                                              |                                                                                   | 31.0                                                                              | 108.0                                                                             |                                                                                   | 32.0                                                                               | 42.0                                                                                |                                                                                     | 10.0                                                                                | 20.0                                                                                |                                                                                     |
| Total Split (%)         | 48.1%                                                                             | 48.1%                                                                             |                                                                                   | 19.4%                                                                             | 67.5%                                                                             |                                                                                   | 20.0%                                                                              | 26.3%                                                                               |                                                                                     | 6.3%                                                                                | 12.5%                                                                               |                                                                                     |
| Maximum Green (s)       | 73.0                                                                              | 73.0                                                                              |                                                                                   | 27.0                                                                              | 104.0                                                                             |                                                                                   | 28.0                                                                               | 38.0                                                                                |                                                                                     | 6.0                                                                                 | 16.0                                                                                |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                                | 3.5                                                                                 |                                                                                     | 3.5                                                                                 | 3.5                                                                                 |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                                | 0.5                                                                                 |                                                                                     | 0.5                                                                                 | 0.5                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Lead/Lag                | Lag                                                                               | Lag                                                                               |                                                                                   | Lead                                                                              |                                                                                   |                                                                                   | Lead                                                                               | Lag                                                                                 |                                                                                     | Lead                                                                                | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      | Yes                                                                               | Yes                                                                               |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                                | Yes                                                                                 |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | C-Max                                                                             | C-Max                                                                             |                                                                                   | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                               | None                                                                                |                                                                                     | None                                                                                | None                                                                                |                                                                                     |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              |                                                                                   |                                                                                   | 11.0                                                                              |                                                                                   |                                                                                    | 11.0                                                                                |                                                                                     |                                                                                     | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Act Effect Green (s)    | 85.6                                                                              | 85.6                                                                              |                                                                                   | 105.1                                                                             | 105.1                                                                             |                                                                                   | 46.9                                                                               | 36.9                                                                                |                                                                                     | 21.1                                                                                | 15.1                                                                                | 160.0                                                                               |
| Actuated g/C Ratio      | 0.54                                                                              | 0.54                                                                              |                                                                                   | 0.66                                                                              | 0.66                                                                              |                                                                                   | 0.29                                                                               | 0.23                                                                                |                                                                                     | 0.13                                                                                | 0.09                                                                                | 1.00                                                                                |
| v/c Ratio               | 0.20                                                                              | 0.63                                                                              |                                                                                   | 0.61                                                                              | 0.93                                                                              |                                                                                   | 0.94                                                                               | 0.84                                                                                |                                                                                     | 0.70                                                                                | 0.81                                                                                | 0.06                                                                                |
| Control Delay           | 32.0                                                                              | 30.1                                                                              |                                                                                   | 17.7                                                                              | 38.4                                                                              |                                                                                   | 84.6                                                                               | 75.8                                                                                |                                                                                     | 75.5                                                                                | 102.1                                                                               | 0.1                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 32.0                                                                              | 30.1                                                                              |                                                                                   | 17.7                                                                              | 38.4                                                                              |                                                                                   | 84.6                                                                               | 75.8                                                                                |                                                                                     | 75.5                                                                                | 102.1                                                                               | 0.1                                                                                 |
| LOS                     | C                                                                                 | C                                                                                 |                                                                                   | B                                                                                 | D                                                                                 |                                                                                   | F                                                                                  | E                                                                                   |                                                                                     | E                                                                                   | F                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 30.2                                                                              |                                                                                   |                                                                                   | 34.4                                                                              |                                                                                   |                                                                                    | 80.1                                                                                |                                                                                     |                                                                                     | 64.9                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | F                                                                                   |                                                                                     |                                                                                     | E                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.94

Intersection Signal Delay: 47.4

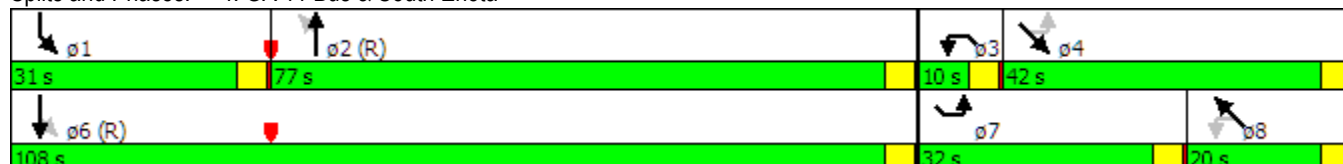
Intersection LOS: D

Intersection Capacity Utilization 93.6%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 4: GA 11 Bus & South Enota



Thompson Bridge / Enota Convenience  
5: Green/Thompson Bridge & Holly & GA 11 Bus

existing a.m.

|                            |  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |                                                                                    |       |                                                                                     |       |
|----------------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|------------------------------------------------------------------------------------|-------|-------------------------------------------------------------------------------------|-------|
| Lane Group                 | EBL                                                                                | EBR                                                                               | NBL                                                                               | NBT                                                                               | NBR                                                                               | SBL  | SBT                                                                                | SBR   | SWL                                                                                 | SWR   |
| Lane Configurations        |                                                                                    |  |  |  |  |      |  |       |  |       |
| Volume (vph)               | 0                                                                                  | 53                                                                                | 19                                                                                | 683                                                                               | 296                                                                               | 0    | 1391                                                                               | 132   | 461                                                                                 | 189   |
| Ideal Flow (vphpl)         | 1900                                                                               | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900 | 1900                                                                               | 1900  | 1900                                                                                | 1900  |
| Storage Length (ft)        | 0                                                                                  | 0                                                                                 | 150                                                                               |                                                                                   | 200                                                                               | 0    |                                                                                    | 0     | 0                                                                                   | 0     |
| Storage Lanes              | 0                                                                                  | 1                                                                                 | 1                                                                                 |                                                                                   | 2                                                                                 | 0    |                                                                                    | 0     | 2                                                                                   | 0     |
| Taper Length (ft)          | 25                                                                                 |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25   |                                                                                    |       | 25                                                                                  |       |
| Lane Util. Factor          | 1.00                                                                               | 1.00                                                                              | 1.00                                                                              | 0.95                                                                              | 0.88                                                                              | 1.00 | 0.95                                                                               | 0.95  | 0.97                                                                                | 0.95  |
| Frt                        |                                                                                    | 0.865                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |      | 0.987                                                                              |       | 0.956                                                                               |       |
| Flt Protected              |                                                                                    |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |      |                                                                                    |       | 0.966                                                                               |       |
| Satd. Flow (prot)          | 0                                                                                  | 1644                                                                              | 1805                                                                              | 3539                                                                              | 2814                                                                              | 0    | 3531                                                                               | 0     | 3333                                                                                | 0     |
| Flt Permitted              |                                                                                    |                                                                                   | 0.086                                                                             |                                                                                   |                                                                                   |      |                                                                                    |       | 0.966                                                                               |       |
| Satd. Flow (perm)          | 0                                                                                  | 1644                                                                              | 163                                                                               | 3539                                                                              | 2814                                                                              | 0    | 3531                                                                               | 0     | 3333                                                                                | 0     |
| Right Turn on Red          |                                                                                    | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |      |                                                                                    | Yes   |                                                                                     |       |
| Satd. Flow (RTOR)          |                                                                                    | 42                                                                                |                                                                                   |                                                                                   | 333                                                                               |      | 12                                                                                 |       |                                                                                     |       |
| Link Speed (mph)           | 30                                                                                 |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |      | 30                                                                                 |       | 30                                                                                  |       |
| Link Distance (ft)         | 497                                                                                |                                                                                   |                                                                                   | 707                                                                               |                                                                                   |      | 3085                                                                               |       | 595                                                                                 |       |
| Travel Time (s)            | 11.3                                                                               |                                                                                   |                                                                                   | 16.1                                                                              |                                                                                   |      | 70.1                                                                               |       | 13.5                                                                                |       |
| Peak Hour Factor           | 0.92                                                                               | 0.83                                                                              | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.92 | 0.89                                                                               | 0.89  | 0.93                                                                                | 0.93  |
| Heavy Vehicles (%)         | 0%                                                                                 | 0%                                                                                | 0%                                                                                | 2%                                                                                | 1%                                                                                | 0%   | 1%                                                                                 | 0%    | 3%                                                                                  | 0%    |
| Adj. Flow (vph)            | 0                                                                                  | 64                                                                                | 21                                                                                | 767                                                                               | 333                                                                               | 0    | 1563                                                                               | 148   | 496                                                                                 | 203   |
| Shared Lane Traffic (%)    |                                                                                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |                                                                                    |       |                                                                                     |       |
| Lane Group Flow (vph)      | 0                                                                                  | 64                                                                                | 21                                                                                | 767                                                                               | 333                                                                               | 0    | 1711                                                                               | 0     | 699                                                                                 | 0     |
| Enter Blocked Intersection | No                                                                                 | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No   | No                                                                                 | No    | No                                                                                  | No    |
| Lane Alignment             | Left                                                                               | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left | Left                                                                               | Right | Left                                                                                | Right |
| Median Width(ft)           | 0                                                                                  |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |      | 12                                                                                 |       | 24                                                                                  |       |
| Link Offset(ft)            | 0                                                                                  |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |      | 0                                                                                  |       | 0                                                                                   |       |
| Crosswalk Width(ft)        | 16                                                                                 |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |      | 16                                                                                 |       | 16                                                                                  |       |
| Two way Left Turn Lane     |                                                                                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |                                                                                    |       |                                                                                     |       |
| Headway Factor             | 1.00                                                                               | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00 | 1.00                                                                               | 1.00  | 1.00                                                                                | 1.00  |
| Turning Speed (mph)        | 15                                                                                 | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15   |                                                                                    | 9     | 15                                                                                  | 9     |
| Number of Detectors        |                                                                                    | 1                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 |      | 2                                                                                  |       | 1                                                                                   |       |
| Detector Template          |                                                                                    | Right                                                                             | Left                                                                              | Thru                                                                              | Right                                                                             |      | Thru                                                                               |       | Left                                                                                |       |
| Leading Detector (ft)      |                                                                                    | 20                                                                                | 20                                                                                | 100                                                                               | 20                                                                                |      | 100                                                                                |       | 20                                                                                  |       |
| Trailing Detector (ft)     |                                                                                    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |      | 0                                                                                  |       | 0                                                                                   |       |
| Detector 1 Position(ft)    |                                                                                    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |      | 0                                                                                  |       | 0                                                                                   |       |
| Detector 1 Size(ft)        |                                                                                    | 20                                                                                | 20                                                                                | 6                                                                                 | 20                                                                                |      | 6                                                                                  |       | 20                                                                                  |       |
| Detector 1 Type            |                                                                                    | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |      | Cl+Ex                                                                              |       | Cl+Ex                                                                               |       |
| Detector 1 Channel         |                                                                                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |                                                                                    |       |                                                                                     |       |
| Detector 1 Extend (s)      |                                                                                    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |      | 0.0                                                                                |       | 0.0                                                                                 |       |
| Detector 1 Queue (s)       |                                                                                    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |      | 0.0                                                                                |       | 0.0                                                                                 |       |
| Detector 1 Delay (s)       |                                                                                    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |      | 0.0                                                                                |       | 0.0                                                                                 |       |
| Detector 2 Position(ft)    |                                                                                    |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |      | 94                                                                                 |       |                                                                                     |       |
| Detector 2 Size(ft)        |                                                                                    |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |      | 6                                                                                  |       |                                                                                     |       |
| Detector 2 Type            |                                                                                    |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |      | Cl+Ex                                                                              |       |                                                                                     |       |
| Detector 2 Channel         |                                                                                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |                                                                                    |       |                                                                                     |       |
| Detector 2 Extend (s)      |                                                                                    |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |      | 0.0                                                                                |       |                                                                                     |       |
| Turn Type                  |                                                                                    | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              |      | NA                                                                                 |       | Prot                                                                                |       |
| Protected Phases           |                                                                                    |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |      | 6                                                                                  |       | 8                                                                                   |       |
| Permitted Phases           |                                                                                    | 4                                                                                 | 2                                                                                 |                                                                                   | 2                                                                                 |      |                                                                                    |       |                                                                                     |       |

Thompson Bridge / Enota Convenience  
5: Green/Thompson Bridge & Holly & GA 11 Bus

existing a.m.



| Lane Group              | EBL | EBR   | NBL   | NBT   | NBR   | SBL | SBT   | SBR | SWL   | SWR |
|-------------------------|-----|-------|-------|-------|-------|-----|-------|-----|-------|-----|
| Detector Phase          |     | 4     | 2     | 2     | 2     |     | 6     |     | 8     |     |
| Switch Phase            |     |       |       |       |       |     |       |     |       |     |
| Minimum Initial (s)     |     | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0   |     | 4.0   |     |
| Minimum Split (s)       |     | 20.0  | 20.0  | 20.0  | 20.0  |     | 20.0  |     | 20.0  |     |
| Total Split (s)         |     | 53.0  | 107.0 | 107.0 | 107.0 |     | 107.0 |     | 53.0  |     |
| Total Split (%)         |     | 33.1% | 66.9% | 66.9% | 66.9% |     | 66.9% |     | 33.1% |     |
| Maximum Green (s)       |     | 49.0  | 103.0 | 103.0 | 103.0 |     | 103.0 |     | 49.0  |     |
| Yellow Time (s)         |     | 3.5   | 3.5   | 3.5   | 3.5   |     | 3.5   |     | 3.5   |     |
| All-Red Time (s)        |     | 0.5   | 0.5   | 0.5   | 0.5   |     | 0.5   |     | 0.5   |     |
| Lost Time Adjust (s)    |     | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0   |     | 0.0   |     |
| Total Lost Time (s)     |     | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0   |     | 4.0   |     |
| Lead/Lag                |     |       |       |       |       |     |       |     |       |     |
| Lead-Lag Optimize?      |     |       |       |       |       |     |       |     |       |     |
| Vehicle Extension (s)   |     | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0   |     | 3.0   |     |
| Recall Mode             |     | None  | C-Max | C-Max | C-Max |     | C-Max |     | None  |     |
| Walk Time (s)           |     | 5.0   | 5.0   | 5.0   | 5.0   |     | 5.0   |     | 5.0   |     |
| Flash Dont Walk (s)     |     | 11.0  | 11.0  | 11.0  | 11.0  |     | 11.0  |     | 11.0  |     |
| Pedestrian Calls (#/hr) |     | 0     | 0     | 0     | 0     |     | 0     |     | 0     |     |
| Act Effect Green (s)    |     | 39.3  | 112.7 | 112.7 | 112.7 |     | 112.7 |     | 39.3  |     |
| Actuated g/C Ratio      |     | 0.25  | 0.70  | 0.70  | 0.70  |     | 0.70  |     | 0.25  |     |
| v/c Ratio               |     | 0.15  | 0.18  | 0.31  | 0.16  |     | 0.69  |     | 0.85  |     |
| Control Delay           |     | 19.2  | 11.6  | 7.8   | 0.3   |     | 16.0  |     | 68.2  |     |
| Queue Delay             |     | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.2   |     | 0.0   |     |
| Total Delay             |     | 19.2  | 11.6  | 7.8   | 0.3   |     | 16.2  |     | 68.2  |     |
| LOS                     |     | B     | B     | A     | A     |     | B     |     | E     |     |
| Approach Delay          |     |       |       | 5.6   |       |     | 16.2  |     | 68.2  |     |
| Approach LOS            |     |       |       | A     |       |     | B     |     | E     |     |

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 23.1

Intersection LOS: C

Intersection Capacity Utilization 68.4%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 5: Green/Thompson Bridge & Holly & GA 11 Bus

|                                                                                            |                                                                                          |
|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
|  02 (R) |  04 |
| 107 s                                                                                      | 53 s                                                                                     |
|  06 (R) |  08 |
| 107 s                                                                                      | 53 s                                                                                     |

## Thompson Bridge / Enota Convenience

## 6: Green &amp; Ridgewood/driveway

existing a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |                                                                                    |  |                                                                                     |                                                                                     |  |                                                                                     |
| Volume (vph)               | 131                                                                               | 5                                                                                 | 22                                                                                | 6                                                                                 | 6                                                                                 | 2                                                                                 | 14                                                                                 | 862                                                                                 | 11                                                                                  | 4                                                                                   | 1798                                                                                | 63                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                               | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.981                                                                             |                                                                                   |                                                                                   | 0.981                                                                             |                                                                                   |                                                                                    | 0.998                                                                               |                                                                                     |                                                                                     | 0.995                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.960                                                                             |                                                                                   |                                                                                   | 0.979                                                                             |                                                                                   |                                                                                    | 0.999                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1789                                                                              | 0                                                                                 | 0                                                                                 | 1825                                                                              | 0                                                                                 | 0                                                                                  | 3531                                                                                | 0                                                                                   | 0                                                                                   | 3558                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.775                                                                             |                                                                                   |                                                                                   | 0.906                                                                             |                                                                                   |                                                                                    | 0.873                                                                               |                                                                                     |                                                                                     | 0.954                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1445                                                                              | 0                                                                                 | 0                                                                                 | 1689                                                                              | 0                                                                                 | 0                                                                                  | 3085                                                                                | 0                                                                                   | 0                                                                                   | 3394                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     | 5                                                                                   |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 30                                                                                  |                                                                                     |                                                                                     | 30                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 511                                                                               |                                                                                   |                                                                                   | 308                                                                               |                                                                                   |                                                                                    | 511                                                                                 |                                                                                     |                                                                                     | 707                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 11.6                                                                              |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                    | 11.6                                                                                |                                                                                     |                                                                                     | 16.1                                                                                |                                                                                     |
| Peak Hour Factor           | 0.79                                                                              | 0.79                                                                              | 0.79                                                                              | 0.50                                                                              | 0.50                                                                              | 0.50                                                                              | 0.93                                                                               | 0.93                                                                                | 0.93                                                                                | 0.89                                                                                | 0.89                                                                                | 0.89                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                 | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 166                                                                               | 6                                                                                 | 28                                                                                | 12                                                                                | 12                                                                                | 4                                                                                 | 15                                                                                 | 927                                                                                 | 12                                                                                  | 4                                                                                   | 2020                                                                                | 71                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 200                                                                               | 0                                                                                 | 0                                                                                 | 28                                                                                | 0                                                                                 | 0                                                                                  | 954                                                                                 | 0                                                                                   | 0                                                                                   | 2095                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                               | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                    | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                 |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                 | 100                                                                                 |                                                                                     | 20                                                                                  | 100                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                 | 6                                                                                   |                                                                                     | 20                                                                                  | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(ft)    |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                    | 94                                                                                  |                                                                                     |                                                                                     | 94                                                                                  |                                                                                     |
| Detector 2 Size(ft)        |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                    | 6                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                              | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |

# Thompson Bridge / Enota Convenience

## 6: Green & Ridgewood/driveway

existing a.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              |                                                                                   | 20.0                                                                              | 20.0                                                                              |                                                                                   | 8.0                                                                                | 20.0                                                                                |                                                                                     | 20.0                                                                                | 20.0                                                                                |                                                                                     |
| Total Split (s)         | 34.0                                                                              | 34.0                                                                              |                                                                                   | 34.0                                                                              | 34.0                                                                              |                                                                                   | 8.0                                                                                | 126.0                                                                               |                                                                                     | 118.0                                                                               | 118.0                                                                               |                                                                                     |
| Total Split (%)         | 21.3%                                                                             | 21.3%                                                                             |                                                                                   | 21.3%                                                                             | 21.3%                                                                             |                                                                                   | 5.0%                                                                               | 78.8%                                                                               |                                                                                     | 73.8%                                                                               | 73.8%                                                                               |                                                                                     |
| Maximum Green (s)       | 30.0                                                                              | 30.0                                                                              |                                                                                   | 30.0                                                                              | 30.0                                                                              |                                                                                   | 4.0                                                                                | 122.0                                                                               |                                                                                     | 114.0                                                                               | 114.0                                                                               |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                                | 3.5                                                                                 |                                                                                     | 3.5                                                                                 | 3.5                                                                                 |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                                | 0.5                                                                                 |                                                                                     | 0.5                                                                                 | 0.5                                                                                 |                                                                                     |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    | 4.0                                                                                 |                                                                                     |                                                                                     | 4.0                                                                                 |                                                                                     |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                                |                                                                                     |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                               | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               |                                                                                     |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                              | 11.0                                                                              |                                                                                   |                                                                                    | 11.0                                                                                |                                                                                     | 11.0                                                                                | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Act Effect Green (s)    |                                                                                   | 25.7                                                                              |                                                                                   |                                                                                   | 25.7                                                                              |                                                                                   |                                                                                    | 126.3                                                                               |                                                                                     |                                                                                     | 126.3                                                                               |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.16                                                                              |                                                                                   |                                                                                   | 0.16                                                                              |                                                                                   |                                                                                    | 0.79                                                                                |                                                                                     |                                                                                     | 0.79                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 0.85                                                                              |                                                                                   |                                                                                   | 0.10                                                                              |                                                                                   |                                                                                    | 0.39                                                                                |                                                                                     |                                                                                     | 0.78                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 92.5                                                                              |                                                                                   |                                                                                   | 49.6                                                                              |                                                                                   |                                                                                    | 6.0                                                                                 |                                                                                     |                                                                                     | 11.9                                                                                |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.2                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 92.5                                                                              |                                                                                   |                                                                                   | 49.6                                                                              |                                                                                   |                                                                                    | 6.0                                                                                 |                                                                                     |                                                                                     | 12.0                                                                                |                                                                                     |
| LOS                     |                                                                                   | F                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   | 92.5                                                                              |                                                                                   |                                                                                   | 49.6                                                                              |                                                                                   |                                                                                    | 6.0                                                                                 |                                                                                     |                                                                                     | 12.0                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | F                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 15.5

Intersection LOS: B

Intersection Capacity Utilization 76.7%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 6: Green & Ridgewood/driveway

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |  |  |  |  |  |
| 126 s                                                                               |                                                                                     |                                                                                     | 34 s                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
| 8 s                                                                                 |                                                                                     |                                                                                     | 118 s                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |

Thompson Bridge / Enota Convenience  
1: Thompson Bridge & Walmart/Taco Bell

existing p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |
| Volume (vph)               | 71                                                                                | 3                                                                                 | 37                                                                                | 14                                                                                | 2                                                                                 | 25                                                                                | 57                                                                                  | 1973                                                                                | 20                                                                                  | 13                                                                                  | 1101                                                                                | 54                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 50                                                                                |                                                                                   | 0                                                                                 | 50                                                                                |                                                                                   | 0                                                                                 | 200                                                                                 |                                                                                     | 100                                                                                 | 200                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                  |                                                                                     |                                                                                     | 25                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.862                                                                             |                                                                                   |                                                                                   | 0.861                                                                             |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     | 0.993                                                                               |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1787                                                                              | 1622                                                                              | 0                                                                                 | 1787                                                                              | 1620                                                                              | 0                                                                                 | 1787                                                                                | 3539                                                                                | 1599                                                                                | 1787                                                                                | 3516                                                                                | 0                                                                                   |
| Flt Permitted              | 0.705                                                                             |                                                                                   |                                                                                   | 0.710                                                                             |                                                                                   |                                                                                   | 0.205                                                                               |                                                                                     |                                                                                     | 0.061                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1326                                                                              | 1622                                                                              | 0                                                                                 | 1336                                                                              | 1620                                                                              | 0                                                                                 | 386                                                                                 | 3539                                                                                | 1599                                                                                | 115                                                                                 | 3516                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 48                                                                                |                                                                                   |                                                                                   | 49                                                                                |                                                                                   |                                                                                     |                                                                                     | 34                                                                                  |                                                                                     |                                                                                     | 9                                                                                   |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 30                                                                                  |                                                                                     |                                                                                     |                                                                                     | 30                                                                                  |
| Link Distance (ft)         |                                                                                   | 300                                                                               |                                                                                   |                                                                                   | 195                                                                               |                                                                                   |                                                                                     | 1235                                                                                |                                                                                     |                                                                                     |                                                                                     | 500                                                                                 |
| Travel Time (s)            |                                                                                   | 6.8                                                                               |                                                                                   |                                                                                   | 4.4                                                                               |                                                                                   |                                                                                     | 28.1                                                                                |                                                                                     |                                                                                     |                                                                                     | 11.4                                                                                |
| Peak Hour Factor           | 0.77                                                                              | 0.77                                                                              | 0.77                                                                              | 0.51                                                                              | 0.51                                                                              | 0.51                                                                              | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                  | 2%                                                                                  | 1%                                                                                  | 1%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 92                                                                                | 4                                                                                 | 48                                                                                | 27                                                                                | 4                                                                                 | 49                                                                                | 61                                                                                  | 2122                                                                                | 22                                                                                  | 14                                                                                  | 1147                                                                                | 56                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 92                                                                                | 52                                                                                | 0                                                                                 | 27                                                                                | 53                                                                                | 0                                                                                 | 61                                                                                  | 2122                                                                                | 22                                                                                  | 14                                                                                  | 1203                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     |                                                                                     | 12                                                                                  |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     |                                                                                     | 0                                                                                   |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     |                                                                                     | 16                                                                                  |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                  | 100                                                                                 | 20                                                                                  | 20                                                                                  | 100                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                  | 6                                                                                   | 20                                                                                  | 20                                                                                  | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(ft)    |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                     | 94                                                                                  |                                                                                     |                                                                                     |                                                                                     | 94                                                                                  |
| Detector 2 Size(ft)        |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               |                                                                                     | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   | 6                                                                                   |                                                                                     |                                                                                     |



Thompson Bridge / Enota Convenience  
1: Thompson Bridge & Walmart/Taco Bell

existing p.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Detector Phase          | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   | 2                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              |                                                                                   | 20.0                                                                              | 20.0                                                                              |                                                                                   | 8.0                                                                                | 20.0                                                                                | 20.0                                                                                | 8.0                                                                                 | 20.0                                                                                |                                                                                     |
| Total Split (s)         | 25.0                                                                              | 25.0                                                                              |                                                                                   | 25.0                                                                              | 25.0                                                                              |                                                                                   | 8.0                                                                                | 127.0                                                                               | 127.0                                                                               | 8.0                                                                                 | 127.0                                                                               |                                                                                     |
| Total Split (%)         | 15.6%                                                                             | 15.6%                                                                             |                                                                                   | 15.6%                                                                             | 15.6%                                                                             |                                                                                   | 5.0%                                                                               | 79.4%                                                                               | 79.4%                                                                               | 5.0%                                                                                | 79.4%                                                                               |                                                                                     |
| Maximum Green (s)       | 21.0                                                                              | 21.0                                                                              |                                                                                   | 21.0                                                                              | 21.0                                                                              |                                                                                   | 4.0                                                                                | 123.0                                                                               | 123.0                                                                               | 4.0                                                                                 | 123.0                                                                               |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                                | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                                | 0.5                                                                                 | 0.5                                                                                 | 0.5                                                                                 | 0.5                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                                | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                               | C-Max                                                                               | C-Max                                                                               | None                                                                                | C-Max                                                                               |                                                                                     |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                              | 11.0                                                                              |                                                                                   |                                                                                    | 11.0                                                                                | 11.0                                                                                |                                                                                     | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |
| Act Effect Green (s)    | 15.8                                                                              | 15.8                                                                              |                                                                                   | 15.8                                                                              | 15.8                                                                              |                                                                                   | 134.6                                                                              | 132.6                                                                               | 132.6                                                                               | 132.7                                                                               | 128.5                                                                               |                                                                                     |
| Actuated g/C Ratio      | 0.10                                                                              | 0.10                                                                              |                                                                                   | 0.10                                                                              | 0.10                                                                              |                                                                                   | 0.84                                                                               | 0.83                                                                                | 0.83                                                                                | 0.83                                                                                | 0.80                                                                                |                                                                                     |
| v/c Ratio               | 0.70                                                                              | 0.26                                                                              |                                                                                   | 0.21                                                                              | 0.26                                                                              |                                                                                   | 0.16                                                                               | 0.72                                                                                | 0.02                                                                                | 0.09                                                                                | 0.43                                                                                |                                                                                     |
| Control Delay           | 96.4                                                                              | 20.9                                                                              |                                                                                   | 67.9                                                                              | 20.6                                                                              |                                                                                   | 3.8                                                                                | 9.5                                                                                 | 2.1                                                                                 | 3.6                                                                                 | 5.7                                                                                 |                                                                                     |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Delay             | 96.4                                                                              | 20.9                                                                              |                                                                                   | 67.9                                                                              | 20.6                                                                              |                                                                                   | 3.8                                                                                | 9.5                                                                                 | 2.1                                                                                 | 3.6                                                                                 | 5.7                                                                                 |                                                                                     |
| LOS                     | F                                                                                 | C                                                                                 |                                                                                   | E                                                                                 | C                                                                                 |                                                                                   | A                                                                                  | A                                                                                   | A                                                                                   | A                                                                                   | A                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   | 69.1                                                                              |                                                                                   |                                                                                   | 36.5                                                                              |                                                                                   |                                                                                    | 9.3                                                                                 |                                                                                     |                                                                                     | 5.7                                                                                 |                                                                                     |
| Approach LOS            |                                                                                   | E                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.72

Intersection Signal Delay: 11.0

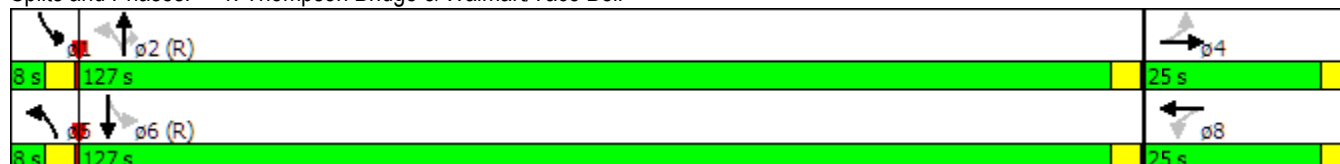
Intersection LOS: B

Intersection Capacity Utilization 71.8%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: Thompson Bridge & Walmart/Taco Bell



# Thompson Bridge / Enota Convenience

## 2: Thompson Bridge & Enota

existing p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |  |  |  |  |  |  |  |
| Volume (vph)               | 161                                                                               | 82                                                                                | 13                                                                                | 55                                                                                | 51                                                                                | 359                                                                               | 17                                                                                  | 1573                                                                                | 36                                                                                  | 215                                                                                 | 942                                                                                 | 26                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 300                                                                               |                                                                                   | 0                                                                                 | 200                                                                               |                                                                                   | 200                                                                               | 300                                                                                 |                                                                                     | 0                                                                                   | 300                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                  |                                                                                     |                                                                                     | 25                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.980                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     | 0.997                                                                               |                                                                                     |                                                                                     | 0.996                                                                               |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1805                                                                              | 1862                                                                              | 0                                                                                 | 1787                                                                              | 1900                                                                              | 1599                                                                              | 1805                                                                                | 3529                                                                                | 0                                                                                   | 1787                                                                                | 3527                                                                                | 0                                                                                   |
| Flt Permitted              | 0.612                                                                             |                                                                                   |                                                                                   | 0.684                                                                             |                                                                                   |                                                                                   | 0.265                                                                               |                                                                                     |                                                                                     | 0.042                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1163                                                                              | 1862                                                                              | 0                                                                                 | 1287                                                                              | 1900                                                                              | 1599                                                                              | 504                                                                                 | 3529                                                                                | 0                                                                                   | 79                                                                                  | 3527                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   |                                                                                   | 211                                                                               |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     | 3                                                                                   |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 30                                                                                  |                                                                                     |                                                                                     | 30                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 160                                                                               |                                                                                   |                                                                                   | 1380                                                                              |                                                                                   |                                                                                     | 173                                                                                 |                                                                                     |                                                                                     | 1235                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 3.6                                                                               |                                                                                   |                                                                                   | 31.4                                                                              |                                                                                   |                                                                                     | 3.9                                                                                 |                                                                                     |                                                                                     | 28.1                                                                                |                                                                                     |
| Peak Hour Factor           | 0.84                                                                              | 0.84                                                                              | 0.84                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 1%                                                                                | 0%                                                                                | 1%                                                                                | 0%                                                                                  | 2%                                                                                  | 1%                                                                                  | 1%                                                                                  | 2%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 192                                                                               | 98                                                                                | 15                                                                                | 61                                                                                | 57                                                                                | 399                                                                               | 18                                                                                  | 1691                                                                                | 39                                                                                  | 234                                                                                 | 1024                                                                                | 28                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 192                                                                               | 113                                                                               | 0                                                                                 | 61                                                                                | 57                                                                                | 399                                                                               | 18                                                                                  | 1730                                                                                | 0                                                                                   | 234                                                                                 | 1052                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                | 100                                                                               | 20                                                                                | 20                                                                                  | 100                                                                                 |                                                                                     | 20                                                                                  | 100                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                | 6                                                                                 | 20                                                                                | 20                                                                                  | 6                                                                                   |                                                                                     | 20                                                                                  | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(ft)    |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                     | 94                                                                                  |                                                                                     |                                                                                     | 94                                                                                  |                                                                                     |
| Detector 2 Size(ft)        |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | pm+pt                                                                             | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  |                                                                                     | pm+pt                                                                               | NA                                                                                  |                                                                                     |
| Protected Phases           | 7                                                                                 | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 8                                                                                 | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |

# Thompson Bridge / Enota Convenience

## 2: Thompson Bridge & Enota

existing p.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Detector Phase          | 7                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 | 8                                                                                 | 5                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Minimum Split (s)       | 8.0                                                                               | 20.0                                                                              |                                                                                   | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 8.0                                                                                | 20.0                                                                                |                                                                                     | 8.0                                                                                 | 20.0                                                                                |                                                                                     |
| Total Split (s)         | 12.0                                                                              | 47.0                                                                              |                                                                                   | 35.0                                                                              | 35.0                                                                              | 35.0                                                                              | 8.0                                                                                | 87.0                                                                                |                                                                                     | 26.0                                                                                | 105.0                                                                               |                                                                                     |
| Total Split (%)         | 7.5%                                                                              | 29.4%                                                                             |                                                                                   | 21.9%                                                                             | 21.9%                                                                             | 21.9%                                                                             | 5.0%                                                                               | 54.4%                                                                               |                                                                                     | 16.3%                                                                               | 65.6%                                                                               |                                                                                     |
| Maximum Green (s)       | 8.0                                                                               | 43.0                                                                              |                                                                                   | 31.0                                                                              | 31.0                                                                              | 31.0                                                                              | 4.0                                                                                | 83.0                                                                                |                                                                                     | 22.0                                                                                | 101.0                                                                               |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                                | 3.5                                                                                 |                                                                                     | 3.5                                                                                 | 3.5                                                                                 |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                                | 0.5                                                                                 |                                                                                     | 0.5                                                                                 | 0.5                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Lead/Lag                | Lead                                                                              |                                                                                   |                                                                                   | Lag                                                                               | Lag                                                                               | Lag                                                                               | Lead                                                                               | Lag                                                                                 |                                                                                     | Lead                                                                                | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                                | Yes                                                                                 |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              | None                                                                              | None                                                                               | C-Max                                                                               |                                                                                     | None                                                                                | C-Max                                                                               |                                                                                     |
| Walk Time (s)           |                                                                                   | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   | 11.0                                                                              |                                                                                   | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              |                                                                                    | 11.0                                                                                |                                                                                     |                                                                                     | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Act Effect Green (s)    | 37.4                                                                              | 37.4                                                                              |                                                                                   | 25.4                                                                              | 25.4                                                                              | 25.4                                                                              | 95.9                                                                               | 90.9                                                                                |                                                                                     | 114.6                                                                               | 109.4                                                                               |                                                                                     |
| Actuated g/C Ratio      | 0.23                                                                              | 0.23                                                                              |                                                                                   | 0.16                                                                              | 0.16                                                                              | 0.16                                                                              | 0.60                                                                               | 0.57                                                                                |                                                                                     | 0.72                                                                                | 0.68                                                                                |                                                                                     |
| v/c Ratio               | 0.63                                                                              | 0.26                                                                              |                                                                                   | 0.30                                                                              | 0.19                                                                              | 0.93                                                                              | 0.05                                                                               | 0.86                                                                                |                                                                                     | 0.88                                                                                | 0.44                                                                                |                                                                                     |
| Control Delay           | 62.4                                                                              | 47.7                                                                              |                                                                                   | 61.2                                                                              | 57.5                                                                              | 58.5                                                                              | 9.8                                                                                | 36.5                                                                                |                                                                                     | 89.2                                                                                | 9.6                                                                                 |                                                                                     |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Delay             | 62.4                                                                              | 47.7                                                                              |                                                                                   | 61.2                                                                              | 57.5                                                                              | 58.5                                                                              | 9.8                                                                                | 36.5                                                                                |                                                                                     | 89.2                                                                                | 9.6                                                                                 |                                                                                     |
| LOS                     | E                                                                                 | D                                                                                 |                                                                                   | E                                                                                 | E                                                                                 | E                                                                                 | A                                                                                  | D                                                                                   |                                                                                     | F                                                                                   | A                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   | 56.9                                                                              |                                                                                   |                                                                                   | 58.7                                                                              |                                                                                   |                                                                                    | 36.2                                                                                |                                                                                     |                                                                                     | 24.1                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | E                                                                                 |                                                                                   |                                                                                   | E                                                                                 |                                                                                   |                                                                                    | D                                                                                   |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 41 (26%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 36.8

Intersection LOS: D

Intersection Capacity Utilization 85.8%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 2: Thompson Bridge & Enota



Thompson Bridge / Enota Convenience  
3: Riverside & Enota

existing p.m.

| Intersection              |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Intersection Delay, s/veh | 58.5 |      |      |      |      |      |      |      |      |      |      |      |
| Intersection LOS          | F    |      |      |      |      |      |      |      |      |      |      |      |
| Movement                  | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
| Vol, veh/h                | 0    | 67   | 306  | 10   | 0    | 26   | 312  | 109  | 0    | 22   | 342  | 37   |
| Peak Hour Factor          | 0.92 | 0.91 | 0.91 | 0.91 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles, %         | 2    | 1    | 1    | 1    | 2    | 1    | 1    | 1    | 2    | 1    | 1    | 1    |
| Mvmt Flow                 | 0    | 74   | 336  | 11   | 0    | 28   | 339  | 118  | 0    | 23   | 360  | 39   |
| Number of Lanes           | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB   | NB   |
|----------------------------|------|------|------|
| Opposing Approach          | WB   | EB   | SB   |
| Opposing Lanes             | 1    | 1    | 1    |
| Conflicting Approach Left  | SB   | NB   | EB   |
| Conflicting Lanes Left     | 1    | 1    | 1    |
| Conflicting Approach Right | NB   | SB   | WB   |
| Conflicting Lanes Right    | 1    | 1    | 1    |
| HCM Control Delay          | 59.9 | 71.3 | 59.3 |
| HCM LOS                    | F    | F    | F    |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 5%    | 17%   | 6%    | 38%   |
| Vol Thru, %            | 85%   | 80%   | 70%   | 43%   |
| Vol Right, %           | 9%    | 3%    | 24%   | 19%   |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 401   | 383   | 447   | 154   |
| LT Vol                 | 22    | 67    | 26    | 59    |
| Through Vol            | 342   | 306   | 312   | 66    |
| RT Vol                 | 37    | 10    | 109   | 29    |
| Lane Flow Rate         | 422   | 421   | 486   | 188   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.947 | 0.949 | 1     | 0.482 |
| Departure Headway (Hd) | 8.073 | 8.114 | 7.969 | 9.241 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 447   | 446   | 452   | 389   |
| Service Time           | 6.132 | 6.172 | 6.06  | 7.32  |
| HCM Lane V/C Ratio     | 0.944 | 0.944 | 1.075 | 0.483 |
| HCM Control Delay      | 59.3  | 59.9  | 71.3  | 20.7  |
| HCM Lane LOS           | F     | F     | F     | C     |
| HCM 95th-tile Q        | 11.2  | 11.2  | 12.9  | 2.5   |

Intersection

Intersection Delay, s/veh

Intersection LOS

| Movement          | SBU  | SBL  | SBT  | SBR  |
|-------------------|------|------|------|------|
| Vol, veh/h        | 0    | 59   | 66   | 29   |
| Peak Hour Factor  | 0.92 | 0.82 | 0.82 | 0.82 |
| Heavy Vehicles, % | 2    | 1    | 1    | 1    |
| Mvmt Flow         | 0    | 72   | 80   | 35   |
| Number of Lanes   | 0    | 0    | 1    | 0    |

| Approach                   | SB   |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 20.7 |
| HCM LOS                    | C    |

Lane

## Thompson Bridge / Enota Convenience

## 4: GA 11 Bus &amp; South Enota

existing p.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | NBL                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                               | SBR                                                                               | SEL                                                                                | SET                                                                                 | SER                                                                                 | NWL                                                                                 | NWT                                                                                 | NWR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |  |  |  |
| Volume (vph)               | 17                                                                                | 584                                                                               | 48                                                                                | 106                                                                               | 579                                                                               | 250                                                                               | 231                                                                                | 142                                                                                 | 28                                                                                  | 237                                                                                 | 341                                                                                 | 354                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                               | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 200                                                                               |                                                                                   | 0                                                                                 | 200                                                                               |                                                                                   | 0                                                                                 | 300                                                                                |                                                                                     | 0                                                                                   | 400                                                                                 |                                                                                     | 400                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                 |                                                                                     |                                                                                     | 25                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.989                                                                             |                                                                                   |                                                                                   | 0.955                                                                             |                                                                                   |                                                                                    | 0.975                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1787                                                                              | 1844                                                                              | 0                                                                                 | 1787                                                                              | 1784                                                                              | 0                                                                                 | 1787                                                                               | 1834                                                                                | 0                                                                                   | 1787                                                                                | 1881                                                                                | 1599                                                                                |
| Flt Permitted              | 0.083                                                                             |                                                                                   |                                                                                   | 0.148                                                                             |                                                                                   |                                                                                   | 0.105                                                                              |                                                                                     |                                                                                     | 0.456                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 156                                                                               | 1844                                                                              | 0                                                                                 | 278                                                                               | 1784                                                                              | 0                                                                                 | 198                                                                                | 1834                                                                                | 0                                                                                   | 858                                                                                 | 1881                                                                                | 1599                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 22                                                                                |                                                                                   |                                                                                    | 6                                                                                   |                                                                                     |                                                                                     |                                                                                     | 396                                                                                 |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 30                                                                                  |                                                                                     |                                                                                     |                                                                                     | 30                                                                                  |
| Link Distance (ft)         |                                                                                   | 494                                                                               |                                                                                   |                                                                                   | 509                                                                               |                                                                                   |                                                                                    | 1007                                                                                |                                                                                     |                                                                                     |                                                                                     | 495                                                                                 |
| Travel Time (s)            |                                                                                   | 11.2                                                                              |                                                                                   |                                                                                   | 11.6                                                                              |                                                                                   |                                                                                    | 22.9                                                                                |                                                                                     |                                                                                     |                                                                                     | 11.3                                                                                |
| Peak Hour Factor           | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.80                                                                               | 0.80                                                                                | 0.80                                                                                | 0.88                                                                                | 0.88                                                                                | 0.88                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 2%                                                                                | 1%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                | 1%                                                                                 | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 19                                                                                | 642                                                                               | 53                                                                                | 119                                                                               | 651                                                                               | 281                                                                               | 289                                                                                | 178                                                                                 | 35                                                                                  | 269                                                                                 | 388                                                                                 | 402                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 19                                                                                | 695                                                                               | 0                                                                                 | 119                                                                               | 932                                                                               | 0                                                                                 | 289                                                                                | 213                                                                                 | 0                                                                                   | 269                                                                                 | 388                                                                                 | 402                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                               | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                    | 12                                                                                  |                                                                                     |                                                                                     |                                                                                     | 12                                                                                  |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     |                                                                                     | 0                                                                                   |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                    | 16                                                                                  |                                                                                     |                                                                                     |                                                                                     | 16                                                                                  |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                 |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                | Right                                                                               |
| Leading Detector (ft)      | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                 | 100                                                                                 |                                                                                     | 20                                                                                  | 100                                                                                 | 20                                                                                  |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                 | 6                                                                                   |                                                                                     | 20                                                                                  | 6                                                                                   | 20                                                                                  |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(ft)    |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                    | 94                                                                                  |                                                                                     |                                                                                     |                                                                                     | 94                                                                                  |
| Detector 2 Size(ft)        |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                    | 6                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                             | NA                                                                                |                                                                                   | pm+pt                                                                              | NA                                                                                  |                                                                                     | pm+pt                                                                               | NA                                                                                  | Free                                                                                |
| Protected Phases           |                                                                                   | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 |                                                                                   | 7                                                                                  | 4                                                                                   |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     |
| Permitted Phases           | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 4                                                                                  |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     | Free                                                                                |

# Thompson Bridge / Enota Convenience

## 4: GA 11 Bus & South Enota

existing p.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | NBL                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                               | SBR                                                                               | SEL                                                                                | SET                                                                                 | SER                                                                                 | NWL                                                                                 | NWT                                                                                 | NWR                                                                                 |
| Detector Phase          | 2                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 |                                                                                   | 7                                                                                  | 4                                                                                   |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              |                                                                                   | 8.0                                                                               | 20.0                                                                              |                                                                                   | 8.0                                                                                | 20.0                                                                                |                                                                                     | 8.0                                                                                 | 20.0                                                                                |                                                                                     |
| Total Split (s)         | 80.0                                                                              | 80.0                                                                              |                                                                                   | 13.0                                                                              | 93.0                                                                              |                                                                                   | 26.0                                                                               | 43.0                                                                                |                                                                                     | 24.0                                                                                | 41.0                                                                                |                                                                                     |
| Total Split (%)         | 50.0%                                                                             | 50.0%                                                                             |                                                                                   | 8.1%                                                                              | 58.1%                                                                             |                                                                                   | 16.3%                                                                              | 26.9%                                                                               |                                                                                     | 15.0%                                                                               | 25.6%                                                                               |                                                                                     |
| Maximum Green (s)       | 76.0                                                                              | 76.0                                                                              |                                                                                   | 9.0                                                                               | 89.0                                                                              |                                                                                   | 22.0                                                                               | 39.0                                                                                |                                                                                     | 20.0                                                                                | 37.0                                                                                |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                                | 3.5                                                                                 |                                                                                     | 3.5                                                                                 | 3.5                                                                                 |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                                | 0.5                                                                                 |                                                                                     | 0.5                                                                                 | 0.5                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Lead/Lag                | Lag                                                                               | Lag                                                                               |                                                                                   | Lead                                                                              |                                                                                   |                                                                                   | Lead                                                                               | Lag                                                                                 |                                                                                     | Lead                                                                                | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      | Yes                                                                               | Yes                                                                               |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                                | Yes                                                                                 |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | C-Max                                                                             | C-Max                                                                             |                                                                                   | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                               | None                                                                                |                                                                                     | None                                                                                | None                                                                                |                                                                                     |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              |                                                                                   |                                                                                   | 11.0                                                                              |                                                                                   |                                                                                    | 11.0                                                                                |                                                                                     |                                                                                     | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Act Effect Green (s)    | 77.8                                                                              | 77.8                                                                              |                                                                                   | 90.6                                                                              | 90.6                                                                              |                                                                                   | 59.9                                                                               | 38.2                                                                                |                                                                                     | 54.7                                                                                | 35.4                                                                                | 160.0                                                                               |
| Actuated g/C Ratio      | 0.49                                                                              | 0.49                                                                              |                                                                                   | 0.57                                                                              | 0.57                                                                              |                                                                                   | 0.37                                                                               | 0.24                                                                                |                                                                                     | 0.34                                                                                | 0.22                                                                                | 1.00                                                                                |
| v/c Ratio               | 0.25                                                                              | 0.77                                                                              |                                                                                   | 0.50                                                                              | 0.91                                                                              |                                                                                   | 0.99                                                                               | 0.48                                                                                |                                                                                     | 0.67                                                                                | 0.93                                                                                | 0.25                                                                                |
| Control Delay           | 36.1                                                                              | 41.4                                                                              |                                                                                   | 23.9                                                                              | 45.3                                                                              |                                                                                   | 97.1                                                                               | 54.9                                                                                |                                                                                     | 44.9                                                                                | 90.6                                                                                | 0.4                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 36.1                                                                              | 41.4                                                                              |                                                                                   | 23.9                                                                              | 45.3                                                                              |                                                                                   | 97.1                                                                               | 54.9                                                                                |                                                                                     | 44.9                                                                                | 90.6                                                                                | 0.4                                                                                 |
| LOS                     | D                                                                                 | D                                                                                 |                                                                                   | C                                                                                 | D                                                                                 |                                                                                   | F                                                                                  | D                                                                                   |                                                                                     | D                                                                                   | F                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 41.2                                                                              |                                                                                   |                                                                                   | 42.9                                                                              |                                                                                   |                                                                                    | 79.2                                                                                |                                                                                     |                                                                                     | 44.7                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | E                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.99

Intersection Signal Delay: 48.6

Intersection LOS: D

Intersection Capacity Utilization 93.1%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 4: GA 11 Bus & South Enota

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| ø1                                                                                  | ø2 (R)                                                                              |                                                                                     | ø3                                                                                  | ø4                                                                                   |                                                                                       |
| 13 s                                                                                | 80 s                                                                                |                                                                                     | 24 s                                                                                | 43 s                                                                                 |                                                                                       |
|  |  |  |  |  |  |
| ø6 (F)                                                                              |                                                                                     |                                                                                     | ø7                                                                                  | ø8                                                                                   |                                                                                       |
| 93 s                                                                                |                                                                                     |                                                                                     | 26 s                                                                                | 41 s                                                                                 |                                                                                       |

Thompson Bridge / Enota Convenience  
5: Green/Thompson Bridge & Holly & GA 11 Bus

existing p.m.

|                            |  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |                                                                                    |       |                                                                                     |                                                                                     |
|----------------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|------------------------------------------------------------------------------------|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                                | EBR                                                                               | NBL                                                                               | NBT                                                                               | NBR                                                                               | SBL  | SBT                                                                                | SBR   | SWL                                                                                 | SWR                                                                                 |
| Lane Configurations        |                                                                                    |  |  |  |  |      |  |       |  |  |
| Volume (vph)               | 0                                                                                  | 35                                                                                | 46                                                                                | 1412                                                                              | 653                                                                               | 0    | 812                                                                                | 125   | 387                                                                                 | 218                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                               | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900 | 1900                                                                               | 1900  | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 0                                                                                  | 0                                                                                 | 150                                                                               |                                                                                   | 200                                                                               | 0    |                                                                                    | 0     | 0                                                                                   | 0                                                                                   |
| Storage Lanes              | 0                                                                                  | 1                                                                                 | 1                                                                                 |                                                                                   | 2                                                                                 | 0    |                                                                                    | 0     | 2                                                                                   | 0                                                                                   |
| Taper Length (ft)          | 25                                                                                 |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25   |                                                                                    |       | 25                                                                                  |                                                                                     |
| Lane Util. Factor          | 1.00                                                                               | 1.00                                                                              | 1.00                                                                              | 0.95                                                                              | 0.88                                                                              | 1.00 | 0.95                                                                               | 0.95  | 0.97                                                                                | 0.95                                                                                |
| Frt                        |                                                                                    | 0.865                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |      | 0.980                                                                              |       | 0.946                                                                               |                                                                                     |
| Flt Protected              |                                                                                    |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |      |                                                                                    |       | 0.969                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                  | 1644                                                                              | 1805                                                                              | 3574                                                                              | 2814                                                                              | 0    | 3507                                                                               | 0     | 3357                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                    |                                                                                   | 0.225                                                                             |                                                                                   |                                                                                   |      |                                                                                    |       | 0.969                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                  | 1644                                                                              | 428                                                                               | 3574                                                                              | 2814                                                                              | 0    | 3507                                                                               | 0     | 3357                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                    | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |      |                                                                                    | Yes   |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                    | 156                                                                               |                                                                                   |                                                                                   | 482                                                                               |      | 21                                                                                 |       |                                                                                     |                                                                                     |
| Link Speed (mph)           | 30                                                                                 |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |      | 30                                                                                 |       | 30                                                                                  |                                                                                     |
| Link Distance (ft)         | 497                                                                                |                                                                                   |                                                                                   | 707                                                                               |                                                                                   |      | 3085                                                                               |       | 595                                                                                 |                                                                                     |
| Travel Time (s)            | 11.3                                                                               |                                                                                   |                                                                                   | 16.1                                                                              |                                                                                   |      | 70.1                                                                               |       | 13.5                                                                                |                                                                                     |
| Peak Hour Factor           | 0.92                                                                               | 0.58                                                                              | 0.93                                                                              | 0.93                                                                              | 0.93                                                                              | 0.92 | 0.87                                                                               | 0.87  | 0.88                                                                                | 0.88                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                 | 0%                                                                                | 0%                                                                                | 1%                                                                                | 1%                                                                                | 0%   | 1%                                                                                 | 0%    | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 0                                                                                  | 60                                                                                | 49                                                                                | 1518                                                                              | 702                                                                               | 0    | 933                                                                                | 144   | 440                                                                                 | 248                                                                                 |
| Shared Lane Traffic (%)    |                                                                                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |                                                                                    |       |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                  | 60                                                                                | 49                                                                                | 1518                                                                              | 702                                                                               | 0    | 1077                                                                               | 0     | 688                                                                                 | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                 | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No   | No                                                                                 | No    | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                               | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left | Left                                                                               | Right | Left                                                                                | Right                                                                               |
| Median Width(ft)           | 0                                                                                  |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |      | 12                                                                                 |       | 24                                                                                  |                                                                                     |
| Link Offset(ft)            | 0                                                                                  |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |      | 0                                                                                  |       | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        | 16                                                                                 |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |      | 16                                                                                 |       | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |                                                                                    |       |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                               | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00 | 1.00                                                                               | 1.00  | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                 | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15   |                                                                                    | 9     | 15                                                                                  | 9                                                                                   |
| Number of Detectors        |                                                                                    | 1                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 |      | 2                                                                                  |       | 1                                                                                   |                                                                                     |
| Detector Template          |                                                                                    | Right                                                                             | Left                                                                              | Thru                                                                              | Right                                                                             |      | Thru                                                                               |       | Left                                                                                |                                                                                     |
| Leading Detector (ft)      |                                                                                    | 20                                                                                | 20                                                                                | 100                                                                               | 20                                                                                |      | 100                                                                                |       | 20                                                                                  |                                                                                     |
| Trailing Detector (ft)     |                                                                                    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |      | 0                                                                                  |       | 0                                                                                   |                                                                                     |
| Detector 1 Position(ft)    |                                                                                    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |      | 0                                                                                  |       | 0                                                                                   |                                                                                     |
| Detector 1 Size(ft)        |                                                                                    | 20                                                                                | 20                                                                                | 6                                                                                 | 20                                                                                |      | 6                                                                                  |       | 20                                                                                  |                                                                                     |
| Detector 1 Type            |                                                                                    | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |      | Cl+Ex                                                                              |       | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |                                                                                    |       |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      |                                                                                    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |      | 0.0                                                                                |       | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       |                                                                                    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |      | 0.0                                                                                |       | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       |                                                                                    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |      | 0.0                                                                                |       | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(ft)    |                                                                                    |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |      | 94                                                                                 |       |                                                                                     |                                                                                     |
| Detector 2 Size(ft)        |                                                                                    |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |      | 6                                                                                  |       |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                    |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |      | Cl+Ex                                                                              |       |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |                                                                                    |       |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                    |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |      | 0.0                                                                                |       |                                                                                     |                                                                                     |
| Turn Type                  |                                                                                    | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              |      | NA                                                                                 |       | Prot                                                                                |                                                                                     |
| Protected Phases           |                                                                                    |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |      | 6                                                                                  |       | 8                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                    | 4                                                                                 | 2                                                                                 |                                                                                   | 2                                                                                 |      |                                                                                    |       |                                                                                     |                                                                                     |



Thompson Bridge / Enota Convenience  
5: Green/Thompson Bridge & Holly & GA 11 Bus

existing p.m.



| Lane Group              | EBL | EBR   | NBL   | NBT   | NBR   | SBL | SBT   | SBR | SWL   | SWR |
|-------------------------|-----|-------|-------|-------|-------|-----|-------|-----|-------|-----|
| Detector Phase          |     | 4     | 2     | 2     | 2     |     | 6     |     | 8     |     |
| Switch Phase            |     |       |       |       |       |     |       |     |       |     |
| Minimum Initial (s)     |     | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0   |     | 4.0   |     |
| Minimum Split (s)       |     | 20.0  | 20.0  | 20.0  | 20.0  |     | 20.0  |     | 20.0  |     |
| Total Split (s)         |     | 55.0  | 105.0 | 105.0 | 105.0 |     | 105.0 |     | 55.0  |     |
| Total Split (%)         |     | 34.4% | 65.6% | 65.6% | 65.6% |     | 65.6% |     | 34.4% |     |
| Maximum Green (s)       |     | 51.0  | 101.0 | 101.0 | 101.0 |     | 101.0 |     | 51.0  |     |
| Yellow Time (s)         |     | 3.5   | 3.5   | 3.5   | 3.5   |     | 3.5   |     | 3.5   |     |
| All-Red Time (s)        |     | 0.5   | 0.5   | 0.5   | 0.5   |     | 0.5   |     | 0.5   |     |
| Lost Time Adjust (s)    |     | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0   |     | 0.0   |     |
| Total Lost Time (s)     |     | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0   |     | 4.0   |     |
| Lead/Lag                |     |       |       |       |       |     |       |     |       |     |
| Lead-Lag Optimize?      |     |       |       |       |       |     |       |     |       |     |
| Vehicle Extension (s)   |     | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0   |     | 3.0   |     |
| Recall Mode             |     | None  | C-Max | C-Max | C-Max |     | C-Max |     | None  |     |
| Walk Time (s)           |     | 5.0   | 5.0   | 5.0   | 5.0   |     | 5.0   |     | 5.0   |     |
| Flash Dont Walk (s)     |     | 11.0  | 11.0  | 11.0  | 11.0  |     | 11.0  |     | 11.0  |     |
| Pedestrian Calls (#/hr) |     | 0     | 0     | 0     | 0     |     | 0     |     | 0     |     |
| Act Effect Green (s)    |     | 38.7  | 113.3 | 113.3 | 113.3 |     | 113.3 |     | 38.7  |     |
| Actuated g/C Ratio      |     | 0.24  | 0.71  | 0.71  | 0.71  |     | 0.71  |     | 0.24  |     |
| v/c Ratio               |     | 0.12  | 0.16  | 0.60  | 0.33  |     | 0.43  |     | 0.85  |     |
| Control Delay           |     | 0.5   | 7.4   | 7.8   | 1.2   |     | 10.8  |     | 68.1  |     |
| Queue Delay             |     | 0.0   | 0.0   | 0.6   | 0.0   |     | 0.0   |     | 0.0   |     |
| Total Delay             |     | 0.5   | 7.4   | 8.4   | 1.2   |     | 10.8  |     | 68.1  |     |
| LOS                     |     | A     | A     | A     | A     |     | B     |     | E     |     |
| Approach Delay          |     |       |       | 6.1   |       |     | 10.8  |     | 68.1  |     |
| Approach LOS            |     |       |       | A     |       |     | B     |     | E     |     |

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 17.7

Intersection LOS: B

Intersection Capacity Utilization 63.6%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 5: Green/Thompson Bridge & Holly & GA 11 Bus

|                                                                                            |                                                                                          |
|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
|  p2 (R) |  p4 |
| 105 s                                                                                      | 55 s                                                                                     |
|  p6 (R) |  p8 |
| 105 s                                                                                      | 55 s                                                                                     |

# Thompson Bridge / Enota Convenience

## 6: Green & Ridgewood/driveway

existing p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |                                                                                     |  |                                                                                     |                                                                                     |  |                                                                                     |
| Volume (vph)               | 252                                                                               | 8                                                                                 | 20                                                                                | 11                                                                                | 14                                                                                | 5                                                                                 | 23                                                                                  | 1849                                                                                | 10                                                                                  | 0                                                                                   | 1097                                                                                | 73                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.990                                                                             |                                                                                   |                                                                                   | 0.979                                                                             |                                                                                   |                                                                                     | 0.999                                                                               |                                                                                     |                                                                                     | 0.991                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.957                                                                             |                                                                                   |                                                                                   | 0.982                                                                             |                                                                                   |                                                                                     | 0.999                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1800                                                                              | 0                                                                                 | 0                                                                                 | 1827                                                                              | 0                                                                                 | 0                                                                                   | 3568                                                                                | 0                                                                                   | 0                                                                                   | 3544                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.729                                                                             |                                                                                   |                                                                                   | 0.894                                                                             |                                                                                   |                                                                                     | 0.911                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1371                                                                              | 0                                                                                 | 0                                                                                 | 1663                                                                              | 0                                                                                 | 0                                                                                   | 3253                                                                                | 0                                                                                   | 0                                                                                   | 3544                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 30                                                                                  |                                                                                     |                                                                                     | 30                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 511                                                                               |                                                                                   |                                                                                   | 308                                                                               |                                                                                   |                                                                                     | 511                                                                                 |                                                                                     |                                                                                     | 707                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 11.6                                                                              |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                     | 11.6                                                                                |                                                                                     |                                                                                     | 16.1                                                                                |                                                                                     |
| Peak Hour Factor           | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.68                                                                              | 0.68                                                                              | 0.68                                                                              | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.89                                                                                | 0.89                                                                                | 0.89                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 277                                                                               | 9                                                                                 | 22                                                                                | 16                                                                                | 21                                                                                | 7                                                                                 | 25                                                                                  | 2010                                                                                | 11                                                                                  | 0                                                                                   | 1233                                                                                | 82                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 308                                                                               | 0                                                                                 | 0                                                                                 | 44                                                                                | 0                                                                                 | 0                                                                                   | 2046                                                                                | 0                                                                                   | 0                                                                                   | 1315                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                  | 100                                                                                 |                                                                                     | 20                                                                                  | 100                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                  | 6                                                                                   |                                                                                     | 20                                                                                  | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(ft)    |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                     | 94                                                                                  |                                                                                     |                                                                                     | 94                                                                                  |                                                                                     |
| Detector 2 Size(ft)        |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     |                                                                                     | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                 | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |

# Thompson Bridge / Enota Convenience

## 6: Green & Ridgewood/driveway

existing p.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              |                                                                                   | 20.0                                                                              | 20.0                                                                              |                                                                                   | 8.0                                                                                 | 20.0                                                                                |                                                                                     | 20.0                                                                                | 20.0                                                                                |                                                                                     |
| Total Split (s)         | 45.0                                                                              | 45.0                                                                              |                                                                                   | 45.0                                                                              | 45.0                                                                              |                                                                                   | 8.0                                                                                 | 115.0                                                                               |                                                                                     | 107.0                                                                               | 107.0                                                                               |                                                                                     |
| Total Split (%)         | 28.1%                                                                             | 28.1%                                                                             |                                                                                   | 28.1%                                                                             | 28.1%                                                                             |                                                                                   | 5.0%                                                                                | 71.9%                                                                               |                                                                                     | 66.9%                                                                               | 66.9%                                                                               |                                                                                     |
| Maximum Green (s)       | 41.0                                                                              | 41.0                                                                              |                                                                                   | 41.0                                                                              | 41.0                                                                              |                                                                                   | 4.0                                                                                 | 111.0                                                                               |                                                                                     | 103.0                                                                               | 103.0                                                                               |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                                 | 3.5                                                                                 |                                                                                     | 3.5                                                                                 | 3.5                                                                                 |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                                 | 0.5                                                                                 |                                                                                     | 0.5                                                                                 | 0.5                                                                                 |                                                                                     |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                     | 4.0                                                                                 |                                                                                     |                                                                                     | 4.0                                                                                 |                                                                                     |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                                |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                                | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               |                                                                                     |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                     | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                              | 11.0                                                                              |                                                                                   |                                                                                     | 11.0                                                                                |                                                                                     | 11.0                                                                                | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Act Effect Green (s)    |                                                                                   | 38.4                                                                              |                                                                                   |                                                                                   | 38.4                                                                              |                                                                                   |                                                                                     | 113.6                                                                               |                                                                                     |                                                                                     | 113.6                                                                               |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.24                                                                              |                                                                                   |                                                                                   | 0.24                                                                              |                                                                                   |                                                                                     | 0.71                                                                                |                                                                                     |                                                                                     | 0.71                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 0.93                                                                              |                                                                                   |                                                                                   | 0.11                                                                              |                                                                                   |                                                                                     | 0.89                                                                                |                                                                                     |                                                                                     | 0.52                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 93.6                                                                              |                                                                                   |                                                                                   | 40.7                                                                              |                                                                                   |                                                                                     | 24.9                                                                                |                                                                                     |                                                                                     | 13.1                                                                                |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.2                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 93.6                                                                              |                                                                                   |                                                                                   | 40.7                                                                              |                                                                                   |                                                                                     | 24.9                                                                                |                                                                                     |                                                                                     | 13.3                                                                                |                                                                                     |
| LOS                     |                                                                                   | F                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                     | C                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   | 93.6                                                                              |                                                                                   |                                                                                   | 40.7                                                                              |                                                                                   |                                                                                     | 24.9                                                                                |                                                                                     |                                                                                     | 13.3                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | F                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                     | C                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 26.7

Intersection LOS: C

Intersection Capacity Utilization 96.6%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 6: Green & Ridgewood/driveway

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| 115 s                                                                               |                                                                                     |                                                                                     | 45 s                                                                                |                                                                                     |                                                                                     |
|  |  |  |  |  |  |
| 8 s                                                                                 | 107 s                                                                               |                                                                                     | 45 s                                                                                |                                                                                     |                                                                                     |

## Appendix D

### Future Intersection Operational Analysis

Thompson Bridge / Enota Convenience  
1: Thompson Bridge & Walmart/Taco Bell

future a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |
| Volume (vph)               | 40                                                                                | 0                                                                                 | 68                                                                                | 3                                                                                 | 1                                                                                 | 4                                                                                 | 55                                                                                  | 939                                                                                 | 1                                                                                   | 6                                                                                   | 1995                                                                                | 85                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 50                                                                                |                                                                                   | 0                                                                                 | 50                                                                                |                                                                                   | 0                                                                                 | 200                                                                                 |                                                                                     | 100                                                                                 | 200                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                  |                                                                                     |                                                                                     | 25                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.871                                                                             |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     | 0.994                                                                               |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1787                                                                              | 1599                                                                              | 0                                                                                 | 1787                                                                              | 1639                                                                              | 0                                                                                 | 1787                                                                                | 3539                                                                                | 1599                                                                                | 1787                                                                                | 3519                                                                                | 0                                                                                   |
| Flt Permitted              | 0.753                                                                             |                                                                                   |                                                                                   | 0.511                                                                             |                                                                                   |                                                                                   | 0.042                                                                               |                                                                                     |                                                                                     | 0.285                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1417                                                                              | 1599                                                                              | 0                                                                                 | 961                                                                               | 1639                                                                              | 0                                                                                 | 79                                                                                  | 3539                                                                                | 1599                                                                                | 536                                                                                 | 3519                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 63                                                                                |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                     |                                                                                     | 34                                                                                  |                                                                                     |                                                                                     | 8                                                                                   |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 30                                                                                  |                                                                                     |                                                                                     |                                                                                     | 30                                                                                  |
| Link Distance (ft)         |                                                                                   | 300                                                                               |                                                                                   |                                                                                   | 195                                                                               |                                                                                   |                                                                                     | 1235                                                                                |                                                                                     |                                                                                     |                                                                                     | 500                                                                                 |
| Travel Time (s)            |                                                                                   | 6.8                                                                               |                                                                                   |                                                                                   | 4.4                                                                               |                                                                                   |                                                                                     | 28.1                                                                                |                                                                                     |                                                                                     |                                                                                     | 11.4                                                                                |
| Peak Hour Factor           | 0.85                                                                              | 0.85                                                                              | 0.85                                                                              | 0.67                                                                              | 0.67                                                                              | 0.67                                                                              | 0.94                                                                                | 0.94                                                                                | 0.94                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                  | 2%                                                                                  | 1%                                                                                  | 1%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 47                                                                                | 0                                                                                 | 80                                                                                | 4                                                                                 | 1                                                                                 | 6                                                                                 | 59                                                                                  | 999                                                                                 | 1                                                                                   | 7                                                                                   | 2217                                                                                | 94                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 47                                                                                | 80                                                                                | 0                                                                                 | 4                                                                                 | 7                                                                                 | 0                                                                                 | 59                                                                                  | 999                                                                                 | 1                                                                                   | 7                                                                                   | 2311                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     |                                                                                     | 12                                                                                  |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     |                                                                                     | 0                                                                                   |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     |                                                                                     | 16                                                                                  |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                  | 100                                                                                 | 20                                                                                  | 20                                                                                  |                                                                                     | 100                                                                                 |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                  | 6                                                                                   | 20                                                                                  | 20                                                                                  |                                                                                     | 6                                                                                   |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |
| Detector 2 Position(ft)    |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                     | 94                                                                                  |                                                                                     |                                                                                     |                                                                                     | 94                                                                                  |
| Detector 2 Size(ft)        |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               |                                                                                     | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   | 6                                                                                   |                                                                                     |                                                                                     |

Thompson Bridge / Enota Convenience  
1: Thompson Bridge & Walmart/Taco Bell

future a.m.

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|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Detector Phase          | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   | 2                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              |                                                                                   | 20.0                                                                              | 20.0                                                                              |                                                                                   | 8.0                                                                                | 20.0                                                                                | 20.0                                                                                | 8.0                                                                                 | 20.0                                                                                |                                                                                     |
| Total Split (s)         | 20.0                                                                              | 20.0                                                                              |                                                                                   | 20.0                                                                              | 20.0                                                                              |                                                                                   | 13.0                                                                               | 132.0                                                                               | 132.0                                                                               | 8.0                                                                                 | 127.0                                                                               |                                                                                     |
| Total Split (%)         | 12.5%                                                                             | 12.5%                                                                             |                                                                                   | 12.5%                                                                             | 12.5%                                                                             |                                                                                   | 8.1%                                                                               | 82.5%                                                                               | 82.5%                                                                               | 5.0%                                                                                | 79.4%                                                                               |                                                                                     |
| Maximum Green (s)       | 16.0                                                                              | 16.0                                                                              |                                                                                   | 16.0                                                                              | 16.0                                                                              |                                                                                   | 9.0                                                                                | 128.0                                                                               | 128.0                                                                               | 4.0                                                                                 | 123.0                                                                               |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                                | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                                | 0.5                                                                                 | 0.5                                                                                 | 0.5                                                                                 | 0.5                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                                | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                               | C-Max                                                                               | C-Max                                                                               | None                                                                                | C-Max                                                                               |                                                                                     |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                              | 11.0                                                                              |                                                                                   |                                                                                    | 11.0                                                                                | 11.0                                                                                |                                                                                     | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |
| Act Effect Green (s)    | 10.7                                                                              | 10.7                                                                              |                                                                                   | 10.7                                                                              | 10.7                                                                              |                                                                                   | 141.3                                                                              | 139.6                                                                               | 139.6                                                                               | 136.4                                                                               | 132.2                                                                               |                                                                                     |
| Actuated g/C Ratio      | 0.07                                                                              | 0.07                                                                              |                                                                                   | 0.07                                                                              | 0.07                                                                              |                                                                                   | 0.88                                                                               | 0.87                                                                                | 0.87                                                                                | 0.85                                                                                | 0.83                                                                                |                                                                                     |
| v/c Ratio               | 0.50                                                                              | 0.48                                                                              |                                                                                   | 0.06                                                                              | 0.06                                                                              |                                                                                   | 0.41                                                                               | 0.32                                                                                | 0.00                                                                                | 0.01                                                                                | 0.79                                                                                |                                                                                     |
| Control Delay           | 88.8                                                                              | 31.8                                                                              |                                                                                   | 69.3                                                                              | 40.6                                                                              |                                                                                   | 21.7                                                                               | 3.0                                                                                 | 0.0                                                                                 | 1.7                                                                                 | 11.1                                                                                |                                                                                     |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Delay             | 88.8                                                                              | 31.8                                                                              |                                                                                   | 69.3                                                                              | 40.6                                                                              |                                                                                   | 21.7                                                                               | 3.0                                                                                 | 0.0                                                                                 | 1.7                                                                                 | 11.1                                                                                |                                                                                     |
| LOS                     | F                                                                                 | C                                                                                 |                                                                                   | E                                                                                 | D                                                                                 |                                                                                   | C                                                                                  | A                                                                                   | A                                                                                   | A                                                                                   | B                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   | 52.9                                                                              |                                                                                   |                                                                                   | 51.0                                                                              |                                                                                   |                                                                                    | 4.0                                                                                 |                                                                                     |                                                                                     | 11.1                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 10.6

Intersection LOS: B

Intersection Capacity Utilization 73.4%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 1: Thompson Bridge & Walmart/Taco Bell

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 s                                                                                 | 132 s                                                                               | 20 s                                                                                | 13 s                                                                                | 127 s                                                                               | 20 s                                                                                | 13 s                                                                                | 127 s                                                                               | 20 s                                                                                | 13 s                                                                                  | 127 s                                                                                 | 20 s                                                                                  | 13 s                                                                                  | 127 s                                                                                 | 20 s                                                                                  |

# Thompson Bridge / Enota Convenience

## 2: Thompson Bridge & Enota

future a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |  |  |  |  |  |  |  |
| Volume (vph)               | 72                                                                                | 62                                                                                | 31                                                                                | 53                                                                                | 33                                                                                | 177                                                                               | 18                                                                                  | 779                                                                                 | 28                                                                                  | 332                                                                                 | 1706                                                                                | 34                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 300                                                                               |                                                                                   | 0                                                                                 | 200                                                                               |                                                                                   | 200                                                                               | 300                                                                                 |                                                                                     | 0                                                                                   | 300                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                  |                                                                                     |                                                                                     | 25                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.949                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     | 0.995                                                                               |                                                                                     |                                                                                     | 0.997                                                                               |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1805                                                                              | 1803                                                                              | 0                                                                                 | 1787                                                                              | 1900                                                                              | 1599                                                                              | 1805                                                                                | 3523                                                                                | 0                                                                                   | 1787                                                                                | 3530                                                                                | 0                                                                                   |
| Flt Permitted              | 0.557                                                                             |                                                                                   |                                                                                   | 0.694                                                                             |                                                                                   |                                                                                   | 0.076                                                                               |                                                                                     |                                                                                     | 0.282                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1058                                                                              | 1803                                                                              | 0                                                                                 | 1306                                                                              | 1900                                                                              | 1599                                                                              | 144                                                                                 | 3523                                                                                | 0                                                                                   | 530                                                                                 | 3530                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 14                                                                                |                                                                                   |                                                                                   |                                                                                   | 199                                                                               |                                                                                     | 3                                                                                   |                                                                                     |                                                                                     | 3                                                                                   |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 30                                                                                  |                                                                                     |                                                                                     | 30                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 160                                                                               |                                                                                   |                                                                                   | 1380                                                                              |                                                                                   |                                                                                     | 173                                                                                 |                                                                                     |                                                                                     | 1235                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 3.6                                                                               |                                                                                   |                                                                                   | 31.4                                                                              |                                                                                   |                                                                                     | 3.9                                                                                 |                                                                                     |                                                                                     | 28.1                                                                                |                                                                                     |
| Peak Hour Factor           | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.94                                                                                | 0.94                                                                                | 0.94                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 1%                                                                                | 0%                                                                                | 1%                                                                                | 0%                                                                                  | 2%                                                                                  | 1%                                                                                  | 1%                                                                                  | 2%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 76                                                                                | 65                                                                                | 33                                                                                | 60                                                                                | 37                                                                                | 199                                                                               | 19                                                                                  | 829                                                                                 | 30                                                                                  | 369                                                                                 | 1896                                                                                | 38                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 76                                                                                | 98                                                                                | 0                                                                                 | 60                                                                                | 37                                                                                | 199                                                                               | 19                                                                                  | 859                                                                                 | 0                                                                                   | 369                                                                                 | 1934                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                | 100                                                                               | 20                                                                                | 20                                                                                  | 100                                                                                 |                                                                                     | 20                                                                                  | 100                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                | 6                                                                                 | 20                                                                                | 20                                                                                  | 6                                                                                   |                                                                                     | 20                                                                                  | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(ft)    |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                     | 94                                                                                  |                                                                                     |                                                                                     | 94                                                                                  |                                                                                     |
| Detector 2 Size(ft)        |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | pm+pt                                                                             | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  |                                                                                     | pm+pt                                                                               | NA                                                                                  |                                                                                     |
| Protected Phases           | 7                                                                                 | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 8                                                                                 | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |

# Thompson Bridge / Enota Convenience

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|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Detector Phase          | 7                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 | 8                                                                                 | 5                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Minimum Split (s)       | 8.0                                                                               | 20.0                                                                              |                                                                                   | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 8.0                                                                                | 20.0                                                                                |                                                                                     | 8.0                                                                                 | 20.0                                                                                |                                                                                     |
| Total Split (s)         | 10.0                                                                              | 35.0                                                                              |                                                                                   | 25.0                                                                              | 25.0                                                                              | 25.0                                                                              | 8.0                                                                                | 84.0                                                                                |                                                                                     | 41.0                                                                                | 117.0                                                                               |                                                                                     |
| Total Split (%)         | 6.3%                                                                              | 21.9%                                                                             |                                                                                   | 15.6%                                                                             | 15.6%                                                                             | 15.6%                                                                             | 5.0%                                                                               | 52.5%                                                                               |                                                                                     | 25.6%                                                                               | 73.1%                                                                               |                                                                                     |
| Maximum Green (s)       | 6.0                                                                               | 31.0                                                                              |                                                                                   | 21.0                                                                              | 21.0                                                                              | 21.0                                                                              | 4.0                                                                                | 80.0                                                                                |                                                                                     | 37.0                                                                                | 113.0                                                                               |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                                | 3.5                                                                                 |                                                                                     | 3.5                                                                                 | 3.5                                                                                 |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                                | 0.5                                                                                 |                                                                                     | 0.5                                                                                 | 0.5                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Lead/Lag                | Lead                                                                              |                                                                                   |                                                                                   | Lag                                                                               |                                                                                   | Lag                                                                               | Lead                                                                               | Lag                                                                                 |                                                                                     | Lead                                                                                | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   | Yes                                                                               | Yes                                                                                | Yes                                                                                 |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              | None                                                                              | None                                                                               | C-Max                                                                               |                                                                                     | None                                                                                | C-Max                                                                               |                                                                                     |
| Walk Time (s)           |                                                                                   | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   | 11.0                                                                              |                                                                                   | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              |                                                                                    | 11.0                                                                                |                                                                                     |                                                                                     | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Act Effect Green (s)    | 22.7                                                                              | 22.7                                                                              |                                                                                   | 12.7                                                                              | 12.7                                                                              | 12.7                                                                              | 116.3                                                                              | 110.5                                                                               |                                                                                     | 129.3                                                                               | 123.3                                                                               |                                                                                     |
| Actuated g/C Ratio      | 0.14                                                                              | 0.14                                                                              |                                                                                   | 0.08                                                                              | 0.08                                                                              | 0.08                                                                              | 0.73                                                                               | 0.69                                                                                |                                                                                     | 0.81                                                                                | 0.77                                                                                |                                                                                     |
| v/c Ratio               | 0.43                                                                              | 0.37                                                                              |                                                                                   | 0.58                                                                              | 0.25                                                                              | 0.64                                                                              | 0.12                                                                               | 0.35                                                                                |                                                                                     | 0.68                                                                                | 0.71                                                                                |                                                                                     |
| Control Delay           | 68.1                                                                              | 56.0                                                                              |                                                                                   | 91.9                                                                              | 71.2                                                                              | 18.0                                                                              | 5.6                                                                                | 9.2                                                                                 |                                                                                     | 12.6                                                                                | 7.4                                                                                 |                                                                                     |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.1                                                                                 |                                                                                     |
| Total Delay             | 68.1                                                                              | 56.0                                                                              |                                                                                   | 91.9                                                                              | 71.2                                                                              | 18.0                                                                              | 5.6                                                                                | 9.2                                                                                 |                                                                                     | 12.6                                                                                | 7.4                                                                                 |                                                                                     |
| LOS                     | E                                                                                 | E                                                                                 |                                                                                   | F                                                                                 | E                                                                                 | B                                                                                 | A                                                                                  | A                                                                                   |                                                                                     | B                                                                                   | A                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   | 61.3                                                                              |                                                                                   |                                                                                   | 39.6                                                                              |                                                                                   |                                                                                    | 9.1                                                                                 |                                                                                     |                                                                                     | 8.3                                                                                 |                                                                                     |
| Approach LOS            |                                                                                   | E                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 41 (26%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 13.5

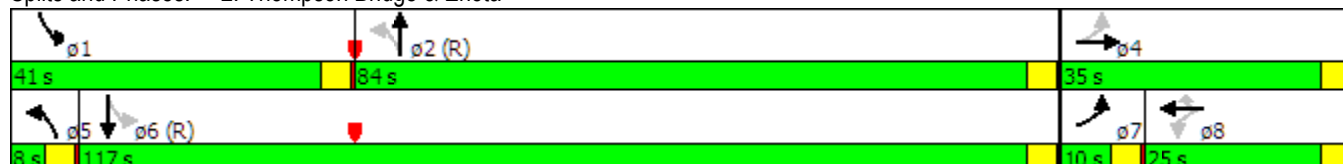
Intersection LOS: B

Intersection Capacity Utilization 72.2%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 2: Thompson Bridge & Enota





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| Intersection              |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Intersection Delay, s/veh | 32.1 |      |      |      |      |      |      |      |      |      |      |      |
| Intersection LOS          | D    |      |      |      |      |      |      |      |      |      |      |      |
| Movement                  | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
| Vol, veh/h                | 0    | 12   | 329  | 8    | 0    | 48   | 218  | 42   | 0    | 11   | 58   | 69   |
| Peak Hour Factor          | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.75 | 0.75 | 0.75 | 0.92 | 0.60 | 0.60 | 0.60 |
| Heavy Vehicles, %         | 2    | 1    | 1    | 1    | 2    | 1    | 1    | 1    | 2    | 1    | 1    | 1    |
| Mvmt Flow                 | 0    | 13   | 358  | 9    | 0    | 64   | 291  | 56   | 0    | 18   | 97   | 115  |
| Number of Lanes           | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB | NB |
|----------------------------|------|----|----|
| Opposing Approach          | WB   | EB | SB |
| Opposing Lanes             | 1    | 1  | 1  |
| Conflicting Approach Left  | SB   | NB | EB |
| Conflicting Lanes Left     | 1    | 1  | 1  |
| Conflicting Approach Right | NB   | SB | WB |
| Conflicting Lanes Right    | 1    | 1  | 1  |
| HCM Control Delay          | 33.7 | 39 | 19 |
| HCM LOS                    | D    | E  | C  |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 8%    | 3%    | 16%   | 49%   |
| Vol Thru, %            | 42%   | 94%   | 71%   | 44%   |
| Vol Right, %           | 50%   | 2%    | 14%   | 6%    |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 138   | 349   | 308   | 293   |
| LT Vol                 | 11    | 12    | 48    | 145   |
| Through Vol            | 58    | 329   | 218   | 129   |
| RT Vol                 | 69    | 8     | 42    | 19    |
| Lane Flow Rate         | 230   | 379   | 411   | 349   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.507 | 0.792 | 0.843 | 0.752 |
| Departure Headway (Hd) | 7.928 | 7.517 | 7.386 | 7.762 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 453   | 482   | 489   | 464   |
| Service Time           | 6.01  | 5.588 | 5.453 | 5.831 |
| HCM Lane V/C Ratio     | 0.508 | 0.786 | 0.84  | 0.752 |
| HCM Control Delay      | 19    | 33.7  | 39    | 30.9  |
| HCM Lane LOS           | C     | D     | E     | D     |
| HCM 95th-tile Q        | 2.8   | 7.2   | 8.5   | 6.3   |

Intersection

Intersection Delay, s/veh

Intersection LOS

| Movement          | SBU  | SBL  | SBT  | SBR  |
|-------------------|------|------|------|------|
| Vol, veh/h        | 0    | 145  | 129  | 19   |
| Peak Hour Factor  | 0.92 | 0.84 | 0.84 | 0.84 |
| Heavy Vehicles, % | 2    | 1    | 1    | 1    |
| Mvmt Flow         | 0    | 173  | 154  | 23   |
| Number of Lanes   | 0    | 0    | 1    | 0    |

| Approach                   | SB   |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 30.9 |
| HCM LOS                    | D    |

Lane

## Thompson Bridge / Enota Convenience

## 4: GA 11 Bus &amp; South Enota

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|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | NBL                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                               | SBR                                                                               | SEL                                                                                | SET                                                                                 | SER                                                                                 | NWL                                                                                 | NWT                                                                                 | NWR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |  |  |  |
| Volume (vph)               | 14                                                                                | 475                                                                               | 121                                                                               | 160                                                                               | 904                                                                               | 183                                                                               | 291                                                                                | 271                                                                                 | 37                                                                                  | 86                                                                                  | 138                                                                                 | 91                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                               | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 200                                                                               |                                                                                   | 0                                                                                 | 200                                                                               |                                                                                   | 0                                                                                 | 300                                                                                |                                                                                     | 0                                                                                   | 400                                                                                 |                                                                                     | 400                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                 |                                                                                     |                                                                                     | 25                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.969                                                                             |                                                                                   |                                                                                   | 0.975                                                                             |                                                                                   |                                                                                    | 0.982                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1787                                                                              | 1809                                                                              | 0                                                                                 | 1787                                                                              | 1819                                                                              | 0                                                                                 | 1787                                                                               | 1847                                                                                | 0                                                                                   | 1787                                                                                | 1881                                                                                | 1599                                                                                |
| Flt Permitted              | 0.044                                                                             |                                                                                   |                                                                                   | 0.251                                                                             |                                                                                   |                                                                                   | 0.205                                                                              |                                                                                     |                                                                                     | 0.281                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 83                                                                                | 1809                                                                              | 0                                                                                 | 472                                                                               | 1819                                                                              | 0                                                                                 | 386                                                                                | 1847                                                                                | 0                                                                                   | 529                                                                                 | 1881                                                                                | 1599                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 13                                                                                |                                                                                   |                                                                                   | 13                                                                                |                                                                                   |                                                                                    | 4                                                                                   |                                                                                     |                                                                                     |                                                                                     | 116                                                                                 |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 30                                                                                  |                                                                                     |                                                                                     |                                                                                     | 30                                                                                  |
| Link Distance (ft)         |                                                                                   | 494                                                                               |                                                                                   |                                                                                   | 509                                                                               |                                                                                   |                                                                                    | 1007                                                                                |                                                                                     |                                                                                     |                                                                                     | 495                                                                                 |
| Travel Time (s)            |                                                                                   | 11.2                                                                              |                                                                                   |                                                                                   | 11.6                                                                              |                                                                                   |                                                                                    | 22.9                                                                                |                                                                                     |                                                                                     |                                                                                     | 11.3                                                                                |
| Peak Hour Factor           | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.80                                                                               | 0.80                                                                                | 0.80                                                                                | 0.88                                                                                | 0.88                                                                                | 0.88                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 2%                                                                                | 1%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                | 1%                                                                                 | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 15                                                                                | 516                                                                               | 132                                                                               | 174                                                                               | 983                                                                               | 199                                                                               | 364                                                                                | 339                                                                                 | 46                                                                                  | 98                                                                                  | 157                                                                                 | 103                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 15                                                                                | 648                                                                               | 0                                                                                 | 174                                                                               | 1182                                                                              | 0                                                                                 | 364                                                                                | 385                                                                                 | 0                                                                                   | 98                                                                                  | 157                                                                                 | 103                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                               | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                    | 12                                                                                  |                                                                                     |                                                                                     |                                                                                     | 12                                                                                  |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     |                                                                                     | 0                                                                                   |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                    | 16                                                                                  |                                                                                     |                                                                                     |                                                                                     | 16                                                                                  |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                 |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                | Right                                                                               |
| Leading Detector (ft)      | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                 | 100                                                                                 |                                                                                     | 20                                                                                  | 100                                                                                 | 20                                                                                  |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                 | 6                                                                                   |                                                                                     | 20                                                                                  | 6                                                                                   | 20                                                                                  |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(ft)    |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                    | 94                                                                                  |                                                                                     |                                                                                     |                                                                                     | 94                                                                                  |
| Detector 2 Size(ft)        |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                    | 6                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                             | NA                                                                                |                                                                                   | pm+pt                                                                              | NA                                                                                  |                                                                                     | pm+pt                                                                               | NA                                                                                  | Free                                                                                |
| Protected Phases           |                                                                                   | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 |                                                                                   | 7                                                                                  | 4                                                                                   |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     |
| Permitted Phases           | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 4                                                                                  |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     | Free                                                                                |

# Thompson Bridge / Enota Convenience

## 4: GA 11 Bus & South Enota

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|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | NBL                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                               | SBR                                                                               | SEL                                                                                | SET                                                                                 | SER                                                                                 | NWL                                                                                 | NWT                                                                                 | NWR                                                                                 |
| Detector Phase          | 2                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 |                                                                                   | 7                                                                                  | 4                                                                                   |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              |                                                                                   | 8.0                                                                               | 20.0                                                                              |                                                                                   | 8.0                                                                                | 20.0                                                                                |                                                                                     | 8.0                                                                                 | 20.0                                                                                |                                                                                     |
| Total Split (s)         | 95.0                                                                              | 95.0                                                                              |                                                                                   | 14.0                                                                              | 109.0                                                                             |                                                                                   | 31.0                                                                               | 42.0                                                                                |                                                                                     | 9.0                                                                                 | 20.0                                                                                |                                                                                     |
| Total Split (%)         | 59.4%                                                                             | 59.4%                                                                             |                                                                                   | 8.8%                                                                              | 68.1%                                                                             |                                                                                   | 19.4%                                                                              | 26.3%                                                                               |                                                                                     | 5.6%                                                                                | 12.5%                                                                               |                                                                                     |
| Maximum Green (s)       | 91.0                                                                              | 91.0                                                                              |                                                                                   | 10.0                                                                              | 105.0                                                                             |                                                                                   | 27.0                                                                               | 38.0                                                                                |                                                                                     | 5.0                                                                                 | 16.0                                                                                |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                                | 3.5                                                                                 |                                                                                     | 3.5                                                                                 | 3.5                                                                                 |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                                | 0.5                                                                                 |                                                                                     | 0.5                                                                                 | 0.5                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Lead/Lag                | Lag                                                                               | Lag                                                                               |                                                                                   | Lead                                                                              |                                                                                   |                                                                                   | Lead                                                                               | Lag                                                                                 |                                                                                     | Lead                                                                                | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      | Yes                                                                               | Yes                                                                               |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                                | Yes                                                                                 |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | C-Max                                                                             | C-Max                                                                             |                                                                                   | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                               | None                                                                                |                                                                                     | None                                                                                | None                                                                                |                                                                                     |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              |                                                                                   |                                                                                   | 11.0                                                                              |                                                                                   |                                                                                    | 11.0                                                                                |                                                                                     |                                                                                     | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Act Effect Green (s)    | 91.8                                                                              | 91.8                                                                              |                                                                                   | 105.5                                                                             | 105.5                                                                             |                                                                                   | 46.5                                                                               | 37.5                                                                                |                                                                                     | 20.5                                                                                | 15.5                                                                                | 160.0                                                                               |
| Actuated g/C Ratio      | 0.57                                                                              | 0.57                                                                              |                                                                                   | 0.66                                                                              | 0.66                                                                              |                                                                                   | 0.29                                                                               | 0.23                                                                                |                                                                                     | 0.13                                                                                | 0.10                                                                                | 1.00                                                                                |
| v/c Ratio               | 0.32                                                                              | 0.62                                                                              |                                                                                   | 0.45                                                                              | 0.98                                                                              |                                                                                   | 1.05                                                                               | 0.89                                                                                |                                                                                     | 0.92                                                                                | 0.86                                                                                | 0.06                                                                                |
| Control Delay           | 40.2                                                                              | 25.5                                                                              |                                                                                   | 14.2                                                                              | 48.3                                                                              |                                                                                   | 109.2                                                                              | 80.6                                                                                |                                                                                     | 119.3                                                                               | 108.8                                                                               | 0.1                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 40.2                                                                              | 25.5                                                                              |                                                                                   | 14.2                                                                              | 48.3                                                                              |                                                                                   | 109.2                                                                              | 80.6                                                                                |                                                                                     | 119.3                                                                               | 108.8                                                                               | 0.1                                                                                 |
| LOS                     | D                                                                                 | C                                                                                 |                                                                                   | B                                                                                 | D                                                                                 |                                                                                   | F                                                                                  | F                                                                                   |                                                                                     | F                                                                                   | F                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 25.8                                                                              |                                                                                   |                                                                                   | 43.9                                                                              |                                                                                   |                                                                                    | 94.5                                                                                |                                                                                     |                                                                                     | 80.4                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | F                                                                                   |                                                                                     |                                                                                     | F                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.05

Intersection Signal Delay: 56.4

Intersection LOS: E

Intersection Capacity Utilization 98.7%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 4: GA 11 Bus & South Enota



Thompson Bridge / Enota Convenience  
5: Green/Thompson Bridge & Holly & GA 11 Bus

future a.m.

|                            |  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |                                                                                    |       |                                                                                     |                                                                                     |
|----------------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|------------------------------------------------------------------------------------|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                                | EBR                                                                               | NBL                                                                               | NBT                                                                               | NBR                                                                               | SBL  | SBT                                                                                | SBR   | SWL                                                                                 | SWR                                                                                 |
| Lane Configurations        |                                                                                    |  |  |  |  |      |  |       |  |  |
| Volume (vph)               | 0                                                                                  | 56                                                                                | 20                                                                                | 734                                                                               | 314                                                                               | 0    | 1485                                                                               | 140   | 489                                                                                 | 201                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                               | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900 | 1900                                                                               | 1900  | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 0                                                                                  | 0                                                                                 | 150                                                                               |                                                                                   | 200                                                                               | 0    |                                                                                    | 0     | 0                                                                                   | 0                                                                                   |
| Storage Lanes              | 0                                                                                  | 1                                                                                 | 1                                                                                 |                                                                                   | 2                                                                                 | 0    |                                                                                    | 0     | 2                                                                                   | 0                                                                                   |
| Taper Length (ft)          | 25                                                                                 |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25   |                                                                                    |       | 25                                                                                  |                                                                                     |
| Lane Util. Factor          | 1.00                                                                               | 1.00                                                                              | 1.00                                                                              | 0.95                                                                              | 0.88                                                                              | 1.00 | 0.95                                                                               | 0.95  | 0.97                                                                                | 0.95                                                                                |
| Frt                        |                                                                                    | 0.865                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |      | 0.987                                                                              |       | 0.956                                                                               |                                                                                     |
| Flt Protected              |                                                                                    |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |      |                                                                                    |       | 0.966                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                  | 1644                                                                              | 1805                                                                              | 3539                                                                              | 2814                                                                              | 0    | 3531                                                                               | 0     | 3333                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                    |                                                                                   | 0.066                                                                             |                                                                                   |                                                                                   |      |                                                                                    |       | 0.966                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                  | 1644                                                                              | 125                                                                               | 3539                                                                              | 2814                                                                              | 0    | 3531                                                                               | 0     | 3333                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                    | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |      |                                                                                    | Yes   |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                    | 34                                                                                |                                                                                   |                                                                                   | 353                                                                               |      | 13                                                                                 |       |                                                                                     |                                                                                     |
| Link Speed (mph)           | 30                                                                                 |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |      | 30                                                                                 |       | 30                                                                                  |                                                                                     |
| Link Distance (ft)         | 497                                                                                |                                                                                   |                                                                                   | 707                                                                               |                                                                                   |      | 3085                                                                               |       | 595                                                                                 |                                                                                     |
| Travel Time (s)            | 11.3                                                                               |                                                                                   |                                                                                   | 16.1                                                                              |                                                                                   |      | 70.1                                                                               |       | 13.5                                                                                |                                                                                     |
| Peak Hour Factor           | 0.92                                                                               | 0.83                                                                              | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.92 | 0.89                                                                               | 0.89  | 0.93                                                                                | 0.93                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                 | 0%                                                                                | 0%                                                                                | 2%                                                                                | 1%                                                                                | 0%   | 1%                                                                                 | 0%    | 3%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 0                                                                                  | 67                                                                                | 22                                                                                | 825                                                                               | 353                                                                               | 0    | 1669                                                                               | 157   | 526                                                                                 | 216                                                                                 |
| Shared Lane Traffic (%)    |                                                                                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |                                                                                    |       |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                  | 67                                                                                | 22                                                                                | 825                                                                               | 353                                                                               | 0    | 1826                                                                               | 0     | 742                                                                                 | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                 | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No   | No                                                                                 | No    | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                               | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left | Left                                                                               | Right | Left                                                                                | Right                                                                               |
| Median Width(ft)           | 0                                                                                  |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |      | 12                                                                                 |       | 24                                                                                  |                                                                                     |
| Link Offset(ft)            | 0                                                                                  |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |      | 0                                                                                  |       | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        | 16                                                                                 |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |      | 16                                                                                 |       | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |                                                                                    |       |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                               | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00 | 1.00                                                                               | 1.00  | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                 | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15   |                                                                                    | 9     | 15                                                                                  | 9                                                                                   |
| Number of Detectors        |                                                                                    | 1                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 |      | 2                                                                                  |       | 1                                                                                   |                                                                                     |
| Detector Template          |                                                                                    | Right                                                                             | Left                                                                              | Thru                                                                              | Right                                                                             |      | Thru                                                                               |       | Left                                                                                |                                                                                     |
| Leading Detector (ft)      |                                                                                    | 20                                                                                | 20                                                                                | 100                                                                               | 20                                                                                |      | 100                                                                                |       | 20                                                                                  |                                                                                     |
| Trailing Detector (ft)     |                                                                                    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |      | 0                                                                                  |       | 0                                                                                   |                                                                                     |
| Detector 1 Position(ft)    |                                                                                    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |      | 0                                                                                  |       | 0                                                                                   |                                                                                     |
| Detector 1 Size(ft)        |                                                                                    | 20                                                                                | 20                                                                                | 6                                                                                 | 20                                                                                |      | 6                                                                                  |       | 20                                                                                  |                                                                                     |
| Detector 1 Type            |                                                                                    | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |      | Cl+Ex                                                                              |       | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |                                                                                    |       |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      |                                                                                    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |      | 0.0                                                                                |       | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       |                                                                                    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |      | 0.0                                                                                |       | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       |                                                                                    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |      | 0.0                                                                                |       | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(ft)    |                                                                                    |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |      | 94                                                                                 |       |                                                                                     |                                                                                     |
| Detector 2 Size(ft)        |                                                                                    |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |      | 6                                                                                  |       |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                    |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |      | Cl+Ex                                                                              |       |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |                                                                                    |       |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                    |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |      | 0.0                                                                                |       |                                                                                     |                                                                                     |
| Turn Type                  |                                                                                    | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              |      | NA                                                                                 |       | Prot                                                                                |                                                                                     |
| Protected Phases           |                                                                                    |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |      | 6                                                                                  |       | 8                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                    | 4                                                                                 | 2                                                                                 |                                                                                   | 2                                                                                 |      |                                                                                    |       |                                                                                     |                                                                                     |

Thompson Bridge / Enota Convenience  
5: Green/Thompson Bridge & Holly & GA 11 Bus

future a.m.



| Lane Group              | EBL | EBR   | NBL   | NBT   | NBR   | SBL | SBT   | SBR | SWL   | SWR |
|-------------------------|-----|-------|-------|-------|-------|-----|-------|-----|-------|-----|
| Detector Phase          |     | 4     | 2     | 2     | 2     |     | 6     |     | 8     |     |
| Switch Phase            |     |       |       |       |       |     |       |     |       |     |
| Minimum Initial (s)     |     | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0   |     | 4.0   |     |
| Minimum Split (s)       |     | 20.0  | 20.0  | 20.0  | 20.0  |     | 20.0  |     | 20.0  |     |
| Total Split (s)         |     | 52.0  | 108.0 | 108.0 | 108.0 |     | 108.0 |     | 52.0  |     |
| Total Split (%)         |     | 32.5% | 67.5% | 67.5% | 67.5% |     | 67.5% |     | 32.5% |     |
| Maximum Green (s)       |     | 48.0  | 104.0 | 104.0 | 104.0 |     | 104.0 |     | 48.0  |     |
| Yellow Time (s)         |     | 3.5   | 3.5   | 3.5   | 3.5   |     | 3.5   |     | 3.5   |     |
| All-Red Time (s)        |     | 0.5   | 0.5   | 0.5   | 0.5   |     | 0.5   |     | 0.5   |     |
| Lost Time Adjust (s)    |     | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0   |     | 0.0   |     |
| Total Lost Time (s)     |     | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0   |     | 4.0   |     |
| Lead/Lag                |     |       |       |       |       |     |       |     |       |     |
| Lead-Lag Optimize?      |     |       |       |       |       |     |       |     |       |     |
| Vehicle Extension (s)   |     | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0   |     | 3.0   |     |
| Recall Mode             |     | None  | C-Max | C-Max | C-Max |     | C-Max |     | None  |     |
| Walk Time (s)           |     | 5.0   | 5.0   | 5.0   | 5.0   |     | 5.0   |     | 5.0   |     |
| Flash Dont Walk (s)     |     | 11.0  | 11.0  | 11.0  | 11.0  |     | 11.0  |     | 11.0  |     |
| Pedestrian Calls (#/hr) |     | 0     | 0     | 0     | 0     |     | 0     |     | 0     |     |
| Act Effect Green (s)    |     | 41.2  | 110.8 | 110.8 | 110.8 |     | 110.8 |     | 41.2  |     |
| Actuated g/C Ratio      |     | 0.26  | 0.69  | 0.69  | 0.69  |     | 0.69  |     | 0.26  |     |
| v/c Ratio               |     | 0.15  | 0.26  | 0.34  | 0.17  |     | 0.75  |     | 0.87  |     |
| Control Delay           |     | 23.9  | 17.2  | 8.5   | 0.3   |     | 25.9  |     | 67.8  |     |
| Queue Delay             |     | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.4   |     | 0.0   |     |
| Total Delay             |     | 23.9  | 17.2  | 8.5   | 0.3   |     | 26.3  |     | 67.8  |     |
| LOS                     |     | C     | B     | A     | A     |     | C     |     | E     |     |
| Approach Delay          |     |       |       | 6.2   |       |     | 26.3  |     | 67.8  |     |
| Approach LOS            |     |       |       | A     |       |     | C     |     | E     |     |

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 28.0

Intersection LOS: C

Intersection Capacity Utilization 72.4%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 5: Green/Thompson Bridge & Holly & GA 11 Bus

|                                                                                            |                                                                                          |
|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
|  p2 (R) |  p4 |
| 108 s                                                                                      | 52 s                                                                                     |
|  p6 (R) |  p8 |
| 108 s                                                                                      | 52 s                                                                                     |

## Thompson Bridge / Enota Convenience

## 6: Green &amp; Ridgewood/driveway

future a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |                                                                                     |  |                                                                                     |                                                                                     |  |                                                                                     |
| Volume (vph)               | 141                                                                               | 5                                                                                 | 23                                                                                | 6                                                                                 | 6                                                                                 | 2                                                                                 | 15                                                                                  | 939                                                                                 | 12                                                                                  | 4                                                                                   | 1915                                                                                | 69                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.982                                                                             |                                                                                   |                                                                                   | 0.981                                                                             |                                                                                   |                                                                                     | 0.998                                                                               |                                                                                     |                                                                                     | 0.995                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.960                                                                             |                                                                                   |                                                                                   | 0.979                                                                             |                                                                                   |                                                                                     | 0.999                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1791                                                                              | 0                                                                                 | 0                                                                                 | 1825                                                                              | 0                                                                                 | 0                                                                                   | 3531                                                                                | 0                                                                                   | 0                                                                                   | 3558                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.774                                                                             |                                                                                   |                                                                                   | 0.910                                                                             |                                                                                   |                                                                                     | 0.859                                                                               |                                                                                     |                                                                                     | 0.953                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1444                                                                              | 0                                                                                 | 0                                                                                 | 1696                                                                              | 0                                                                                 | 0                                                                                   | 3036                                                                                | 0                                                                                   | 0                                                                                   | 3390                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 30                                                                                  |                                                                                     |                                                                                     | 30                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 511                                                                               |                                                                                   |                                                                                   | 308                                                                               |                                                                                   |                                                                                     | 511                                                                                 |                                                                                     |                                                                                     | 707                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 11.6                                                                              |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                     | 11.6                                                                                |                                                                                     |                                                                                     | 16.1                                                                                |                                                                                     |
| Peak Hour Factor           | 0.79                                                                              | 0.79                                                                              | 0.79                                                                              | 0.50                                                                              | 0.50                                                                              | 0.50                                                                              | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                | 0.89                                                                                | 0.89                                                                                | 0.89                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 178                                                                               | 6                                                                                 | 29                                                                                | 12                                                                                | 12                                                                                | 4                                                                                 | 16                                                                                  | 1010                                                                                | 13                                                                                  | 4                                                                                   | 2152                                                                                | 78                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 213                                                                               | 0                                                                                 | 0                                                                                 | 28                                                                                | 0                                                                                 | 0                                                                                   | 1039                                                                                | 0                                                                                   | 0                                                                                   | 2234                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                  | 100                                                                                 |                                                                                     | 20                                                                                  | 100                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                  | 6                                                                                   |                                                                                     | 20                                                                                  | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(ft)    |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                     | 94                                                                                  |                                                                                     |                                                                                     | 94                                                                                  |                                                                                     |
| Detector 2 Size(ft)        |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                 | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |

# Thompson Bridge / Enota Convenience

## 6: Green & Ridgewood/driveway

future a.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              |                                                                                   | 20.0                                                                              | 20.0                                                                              |                                                                                   | 8.0                                                                                | 20.0                                                                                |                                                                                     | 20.0                                                                                | 20.0                                                                                |                                                                                     |
| Total Split (s)         | 32.0                                                                              | 32.0                                                                              |                                                                                   | 32.0                                                                              | 32.0                                                                              |                                                                                   | 8.0                                                                                | 128.0                                                                               |                                                                                     | 120.0                                                                               | 120.0                                                                               |                                                                                     |
| Total Split (%)         | 20.0%                                                                             | 20.0%                                                                             |                                                                                   | 20.0%                                                                             | 20.0%                                                                             |                                                                                   | 5.0%                                                                               | 80.0%                                                                               |                                                                                     | 75.0%                                                                               | 75.0%                                                                               |                                                                                     |
| Maximum Green (s)       | 28.0                                                                              | 28.0                                                                              |                                                                                   | 28.0                                                                              | 28.0                                                                              |                                                                                   | 4.0                                                                                | 124.0                                                                               |                                                                                     | 116.0                                                                               | 116.0                                                                               |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                                | 3.5                                                                                 |                                                                                     | 3.5                                                                                 | 3.5                                                                                 |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                                | 0.5                                                                                 |                                                                                     | 0.5                                                                                 | 0.5                                                                                 |                                                                                     |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    | 4.0                                                                                 |                                                                                     |                                                                                     | 4.0                                                                                 |                                                                                     |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                                |                                                                                     |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                               | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               |                                                                                     |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                              | 11.0                                                                              |                                                                                   |                                                                                    | 11.0                                                                                |                                                                                     | 11.0                                                                                | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Act Effect Green (s)    |                                                                                   | 26.0                                                                              |                                                                                   |                                                                                   | 26.0                                                                              |                                                                                   |                                                                                    | 126.0                                                                               |                                                                                     |                                                                                     | 126.0                                                                               |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.16                                                                              |                                                                                   |                                                                                   | 0.16                                                                              |                                                                                   |                                                                                    | 0.79                                                                                |                                                                                     |                                                                                     | 0.79                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 0.89                                                                              |                                                                                   |                                                                                   | 0.10                                                                              |                                                                                   |                                                                                    | 0.43                                                                                |                                                                                     |                                                                                     | 0.84                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 100.1                                                                             |                                                                                   |                                                                                   | 50.4                                                                              |                                                                                   |                                                                                    | 6.3                                                                                 |                                                                                     |                                                                                     | 13.8                                                                                |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.3                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 100.1                                                                             |                                                                                   |                                                                                   | 50.4                                                                              |                                                                                   |                                                                                    | 6.3                                                                                 |                                                                                     |                                                                                     | 14.1                                                                                |                                                                                     |
| LOS                     |                                                                                   | F                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   | 100.1                                                                             |                                                                                   |                                                                                   | 50.4                                                                              |                                                                                   |                                                                                    | 6.3                                                                                 |                                                                                     |                                                                                     | 14.1                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | F                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 17.3

Intersection LOS: B

Intersection Capacity Utilization 80.7%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 6: Green & Ridgewood/driveway

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| 128 s                                                                               | 32 s                                                                                | 32 s                                                                                | 8 s                                                                                 | 120 s                                                                               | 32 s                                                                                |
|  |  |  |  |  |  |
| 8 s                                                                                 | 120 s                                                                               | 32 s                                                                                | 8 s                                                                                 | 120 s                                                                               | 32 s                                                                                |



Thompson Bridge / Enota Convenience  
7: Thompson Bridge

future a.m.

| Intersection             |        |      |        |      |        |      |
|--------------------------|--------|------|--------|------|--------|------|
| Int Delay, s/veh         | 0.5    |      |        |      |        |      |
|                          |        |      |        |      |        |      |
| Movement                 | EBL    | EBR  | NBL    | NBT  | SBT    | SBR  |
| Vol, veh/h               | 0      | 35   | 21     | 812  | 1754   | 35   |
| Conflicting Peds, #/hr   | 0      | 0    | 0      | 0    | 0      | 0    |
| Sign Control             | Stop   | Stop | Free   | Free | Free   | Free |
| RT Channelized           | -      | None | -      | None | -      | None |
| Storage Length           | 0      | -    | 0      | -    | -      | -    |
| Veh in Median Storage, # | 0      | -    | -      | 0    | 0      | -    |
| Grade, %                 | 0      | -    | -      | 0    | 0      | -    |
| Peak Hour Factor         | 85     | 85   | 94     | 94   | 90     | 90   |
| Heavy Vehicles, %        | 0      | 0    | 0      | 2    | 2      | 0    |
| Mvmt Flow                | 0      | 41   | 22     | 864  | 1949   | 39   |
|                          |        |      |        |      |        |      |
| Major/Minor              | Minor2 |      | Major1 |      | Major2 |      |
| Conflicting Flow All     | 2445   | 994  | 1988   | 0    | -      | 0    |
| Stage 1                  | 1968   | -    | -      | -    | -      | -    |
| Stage 2                  | 477    | -    | -      | -    | -      | -    |
| Critical Hdwy            | 6.8    | 6.9  | 4.1    | -    | -      | -    |
| Critical Hdwy Stg 1      | 5.8    | -    | -      | -    | -      | -    |
| Critical Hdwy Stg 2      | 5.8    | -    | -      | -    | -      | -    |
| Follow-up Hdwy           | 3.5    | 3.3  | 2.2    | -    | -      | -    |
| Pot Cap-1 Maneuver       | 27     | 247  | 294    | -    | -      | -    |
| Stage 1                  | 97     | -    | -      | -    | -      | -    |
| Stage 2                  | 596    | -    | -      | -    | -      | -    |
| Platoon blocked, %       |        |      |        | -    | -      | -    |
| Mov Cap-1 Maneuver       | 25     | 247  | 294    | -    | -      | -    |
| Mov Cap-2 Maneuver       | 25     | -    | -      | -    | -      | -    |
| Stage 1                  | 97     | -    | -      | -    | -      | -    |
| Stage 2                  | 551    | -    | -      | -    | -      | -    |
|                          |        |      |        |      |        |      |
| Approach                 | EB     |      | NB     |      | SB     |      |
| HCM Control Delay, s     | 22.5   |      | 0.5    |      | 0      |      |
| HCM LOS                  | C      |      |        |      |        |      |
|                          |        |      |        |      |        |      |
| Minor Lane/Major Mvmt    | NBL    | NBT  | EBLn1  | SBT  | SBR    |      |
| Capacity (veh/h)         | 294    | -    | 247    | -    | -      |      |
| HCM Lane V/C Ratio       | 0.076  | -    | 0.167  | -    | -      |      |
| HCM Control Delay (s)    | 18.2   | -    | 22.5   | -    | -      |      |
| HCM Lane LOS             | C      | -    | C      | -    | -      |      |
| HCM 95th %tile Q(veh)    | 0.2    | -    | 0.6    | -    | -      |      |

**Intersection**

Int Delay, s/veh 1.4

| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
|--------------------------|------|------|------|------|------|------|
| Vol, veh/h               | 139  | 5    | 6    | 79   | 5    | 26   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 95   | 95   | 89   | 89   | 80   | 80   |
| Heavy Vehicles, %        | 1    | 0    | 0    | 1    | 0    | 0    |
| Mvmt Flow                | 146  | 5    | 7    | 89   | 6    | 32   |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |     |
|----------------------|--------|---|--------|---|--------|-----|
| Conflicting Flow All | 0      | 0 | 152    | 0 | 251    | 149 |
| Stage 1              | -      | - | -      | - | 149    | -   |
| Stage 2              | -      | - | -      | - | 102    | -   |
| Critical Hdwy        | -      | - | 4.1    | - | 6.4    | 6.2 |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.4    | -   |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.4    | -   |
| Follow-up Hdwy       | -      | - | 2.2    | - | 3.5    | 3.3 |
| Pot Cap-1 Maneuver   | -      | - | 1441   | - | 742    | 903 |
| Stage 1              | -      | - | -      | - | 884    | -   |
| Stage 2              | -      | - | -      | - | 927    | -   |
| Platoon blocked, %   | -      | - | -      | - | -      | -   |
| Mov Cap-1 Maneuver   | -      | - | 1441   | - | 738    | 903 |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 738    | -   |
| Stage 1              | -      | - | -      | - | 884    | -   |
| Stage 2              | -      | - | -      | - | 922    | -   |

| Approach             | EB | WB  | NB  |
|----------------------|----|-----|-----|
| HCM Control Delay, s | 0  | 0.5 | 9.3 |
| HCM LOS              |    |     | A   |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 872   | -   | -   | 1441  | -   |
| HCM Lane V/C Ratio    | 0.044 | -   | -   | 0.005 | -   |
| HCM Control Delay (s) | 9.3   | -   | -   | 7.5   | 0   |
| HCM Lane LOS          | A     | -   | -   | A     | A   |
| HCM 95th %tile Q(veh) | 0.1   | -   | -   | 0     | -   |

Thompson Bridge / Enota Convenience  
1: Thompson Bridge & Walmart/Taco Bell

future p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |
| Volume (vph)               | 75                                                                                | 3                                                                                 | 39                                                                                | 15                                                                                | 2                                                                                 | 27                                                                                | 60                                                                                  | 2097                                                                                | 21                                                                                  | 14                                                                                  | 1172                                                                                | 57                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 50                                                                                |                                                                                   | 0                                                                                 | 50                                                                                |                                                                                   | 0                                                                                 | 200                                                                                 |                                                                                     | 100                                                                                 | 200                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                  |                                                                                     |                                                                                     | 25                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.861                                                                             |                                                                                   |                                                                                   | 0.861                                                                             |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     | 0.993                                                                               |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1787                                                                              | 1620                                                                              | 0                                                                                 | 1787                                                                              | 1620                                                                              | 0                                                                                 | 1787                                                                                | 3539                                                                                | 1599                                                                                | 1787                                                                                | 3516                                                                                | 0                                                                                   |
| Flt Permitted              | 0.689                                                                             |                                                                                   |                                                                                   | 0.697                                                                             |                                                                                   |                                                                                   | 0.187                                                                               |                                                                                     |                                                                                     | 0.048                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1296                                                                              | 1620                                                                              | 0                                                                                 | 1311                                                                              | 1620                                                                              | 0                                                                                 | 352                                                                                 | 3539                                                                                | 1599                                                                                | 90                                                                                  | 3516                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 51                                                                                |                                                                                   |                                                                                   | 53                                                                                |                                                                                   |                                                                                     |                                                                                     | 34                                                                                  |                                                                                     | 10                                                                                  |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 30                                                                                  |                                                                                     |                                                                                     | 30                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 300                                                                               |                                                                                   |                                                                                   | 195                                                                               |                                                                                   |                                                                                     | 1235                                                                                |                                                                                     |                                                                                     | 500                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 6.8                                                                               |                                                                                   |                                                                                   | 4.4                                                                               |                                                                                   |                                                                                     | 28.1                                                                                |                                                                                     |                                                                                     | 11.4                                                                                |                                                                                     |
| Peak Hour Factor           | 0.77                                                                              | 0.77                                                                              | 0.77                                                                              | 0.51                                                                              | 0.51                                                                              | 0.51                                                                              | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                  | 2%                                                                                  | 1%                                                                                  | 1%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 97                                                                                | 4                                                                                 | 51                                                                                | 29                                                                                | 4                                                                                 | 53                                                                                | 65                                                                                  | 2255                                                                                | 23                                                                                  | 15                                                                                  | 1221                                                                                | 59                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 97                                                                                | 55                                                                                | 0                                                                                 | 29                                                                                | 57                                                                                | 0                                                                                 | 65                                                                                  | 2255                                                                                | 23                                                                                  | 15                                                                                  | 1280                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   | 2                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                  | 100                                                                                 | 20                                                                                  | 20                                                                                  | 100                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                  | 6                                                                                   | 20                                                                                  | 20                                                                                  | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(ft)    |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                     | 94                                                                                  |                                                                                     |                                                                                     | 94                                                                                  |                                                                                     |
| Detector 2 Size(ft)        |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   | 6                                                                                   |                                                                                     |                                                                                     |

Thompson Bridge / Enota Convenience  
1: Thompson Bridge & Walmart/Taco Bell

future p.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Detector Phase          | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   | 2                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              |                                                                                   | 20.0                                                                              | 20.0                                                                              |                                                                                   | 8.0                                                                                | 20.0                                                                                | 20.0                                                                                | 8.0                                                                                 | 20.0                                                                                |                                                                                     |
| Total Split (s)         | 24.0                                                                              | 24.0                                                                              |                                                                                   | 24.0                                                                              | 24.0                                                                              |                                                                                   | 8.0                                                                                | 128.0                                                                               | 128.0                                                                               | 8.0                                                                                 | 128.0                                                                               |                                                                                     |
| Total Split (%)         | 15.0%                                                                             | 15.0%                                                                             |                                                                                   | 15.0%                                                                             | 15.0%                                                                             |                                                                                   | 5.0%                                                                               | 80.0%                                                                               | 80.0%                                                                               | 5.0%                                                                                | 80.0%                                                                               |                                                                                     |
| Maximum Green (s)       | 20.0                                                                              | 20.0                                                                              |                                                                                   | 20.0                                                                              | 20.0                                                                              |                                                                                   | 4.0                                                                                | 124.0                                                                               | 124.0                                                                               | 4.0                                                                                 | 124.0                                                                               |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                                | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                                | 0.5                                                                                 | 0.5                                                                                 | 0.5                                                                                 | 0.5                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                                | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                               | C-Max                                                                               | C-Max                                                                               | None                                                                                | C-Max                                                                               |                                                                                     |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                              | 11.0                                                                              |                                                                                   |                                                                                    | 11.0                                                                                | 11.0                                                                                |                                                                                     | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |
| Act Effect Green (s)    | 16.2                                                                              | 16.2                                                                              |                                                                                   | 16.2                                                                              | 16.2                                                                              |                                                                                   | 134.2                                                                              | 132.6                                                                               | 132.6                                                                               | 132.3                                                                               | 128.5                                                                               |                                                                                     |
| Actuated g/C Ratio      | 0.10                                                                              | 0.10                                                                              |                                                                                   | 0.10                                                                              | 0.10                                                                              |                                                                                   | 0.84                                                                               | 0.83                                                                                | 0.83                                                                                | 0.83                                                                                | 0.80                                                                                |                                                                                     |
| v/c Ratio               | 0.74                                                                              | 0.26                                                                              |                                                                                   | 0.22                                                                              | 0.27                                                                              |                                                                                   | 0.19                                                                               | 0.77                                                                                | 0.02                                                                                | 0.12                                                                                | 0.45                                                                                |                                                                                     |
| Control Delay           | 100.1                                                                             | 20.2                                                                              |                                                                                   | 68.3                                                                              | 20.1                                                                              |                                                                                   | 3.7                                                                                | 10.5                                                                                | 1.9                                                                                 | 4.4                                                                                 | 5.9                                                                                 |                                                                                     |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.1                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Delay             | 100.1                                                                             | 20.2                                                                              |                                                                                   | 68.3                                                                              | 20.1                                                                              |                                                                                   | 3.7                                                                                | 10.5                                                                                | 1.9                                                                                 | 4.4                                                                                 | 5.9                                                                                 |                                                                                     |
| LOS                     | F                                                                                 | C                                                                                 |                                                                                   | E                                                                                 | C                                                                                 |                                                                                   | A                                                                                  | B                                                                                   | A                                                                                   | A                                                                                   | A                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   | 71.2                                                                              |                                                                                   |                                                                                   | 36.4                                                                              |                                                                                   |                                                                                    | 10.2                                                                                |                                                                                     |                                                                                     | 5.9                                                                                 |                                                                                     |
| Approach LOS            |                                                                                   | E                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | B                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.77

Intersection Signal Delay: 11.8

Intersection LOS: B

Intersection Capacity Utilization 75.5%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 1: Thompson Bridge & Walmart/Taco Bell

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 s                                                                                 | 128 s                                                                               | 24 s                                                                                | 8 s                                                                                 | 128 s                                                                               | 24 s                                                                                | 8 s                                                                                 | 128 s                                                                               | 24 s                                                                                | 8 s                                                                                   | 128 s                                                                                 | 24 s                                                                                  | 8 s                                                                                   | 128 s                                                                                 | 24 s                                                                                  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 s                                                                                 | 128 s                                                                               | 24 s                                                                                | 8 s                                                                                 | 128 s                                                                               | 24 s                                                                                | 8 s                                                                                 | 128 s                                                                               | 24 s                                                                                | 8 s                                                                                   | 128 s                                                                                 | 24 s                                                                                  | 8 s                                                                                   | 128 s                                                                                 | 24 s                                                                                  |

# Thompson Bridge / Enota Convenience

## 2: Thompson Bridge & Enota

future p.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |  |  |  |  |  |  |  |
| Volume (vph)               | 202                                                                               | 96                                                                                | 14                                                                                | 63                                                                                | 58                                                                                | 381                                                                               | 18                                                                                  | 1669                                                                                | 38                                                                                  | 228                                                                                 | 1003                                                                                | 28                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 300                                                                               |                                                                                   | 0                                                                                 | 200                                                                               |                                                                                   | 200                                                                               | 300                                                                                 |                                                                                     | 0                                                                                   | 300                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                  |                                                                                     |                                                                                     | 25                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.981                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     | 0.997                                                                               |                                                                                     |                                                                                     | 0.996                                                                               |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1805                                                                              | 1864                                                                              | 0                                                                                 | 1787                                                                              | 1900                                                                              | 1599                                                                              | 1805                                                                                | 3529                                                                                | 0                                                                                   | 1787                                                                                | 3527                                                                                | 0                                                                                   |
| Flt Permitted              | 0.612                                                                             |                                                                                   |                                                                                   | 0.673                                                                             |                                                                                   |                                                                                   | 0.235                                                                               |                                                                                     |                                                                                     | 0.044                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1163                                                                              | 1864                                                                              | 0                                                                                 | 1266                                                                              | 1900                                                                              | 1599                                                                              | 446                                                                                 | 3529                                                                                | 0                                                                                   | 83                                                                                  | 3527                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   |                                                                                   | 173                                                                               |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     | 3                                                                                   |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 30                                                                                  |                                                                                     |                                                                                     | 30                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 160                                                                               |                                                                                   |                                                                                   | 1380                                                                              |                                                                                   |                                                                                     | 173                                                                                 |                                                                                     |                                                                                     | 1235                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 3.6                                                                               |                                                                                   |                                                                                   | 31.4                                                                              |                                                                                   |                                                                                     | 3.9                                                                                 |                                                                                     |                                                                                     | 28.1                                                                                |                                                                                     |
| Peak Hour Factor           | 0.84                                                                              | 0.84                                                                              | 0.84                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 1%                                                                                | 0%                                                                                | 1%                                                                                | 0%                                                                                  | 2%                                                                                  | 1%                                                                                  | 1%                                                                                  | 2%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 240                                                                               | 114                                                                               | 17                                                                                | 70                                                                                | 64                                                                                | 423                                                                               | 19                                                                                  | 1795                                                                                | 41                                                                                  | 248                                                                                 | 1090                                                                                | 30                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 240                                                                               | 131                                                                               | 0                                                                                 | 70                                                                                | 64                                                                                | 423                                                                               | 19                                                                                  | 1836                                                                                | 0                                                                                   | 248                                                                                 | 1120                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                | 100                                                                               | 20                                                                                | 20                                                                                  | 100                                                                                 |                                                                                     | 20                                                                                  | 100                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                | 6                                                                                 | 20                                                                                | 20                                                                                  | 6                                                                                   |                                                                                     | 20                                                                                  | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(ft)    |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                     | 94                                                                                  |                                                                                     |                                                                                     | 94                                                                                  |                                                                                     |
| Detector 2 Size(ft)        |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | pm+pt                                                                             | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  |                                                                                     | pm+pt                                                                               | NA                                                                                  |                                                                                     |
| Protected Phases           | 7                                                                                 | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 8                                                                                 | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |

# Thompson Bridge / Enota Convenience

## 2: Thompson Bridge & Enota

future p.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Detector Phase          | 7                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 | 8                                                                                 | 5                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Minimum Split (s)       | 8.0                                                                               | 20.0                                                                              |                                                                                   | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 8.0                                                                                | 20.0                                                                                |                                                                                     | 8.0                                                                                 | 20.0                                                                                |                                                                                     |
| Total Split (s)         | 12.0                                                                              | 46.0                                                                              |                                                                                   | 34.0                                                                              | 34.0                                                                              | 34.0                                                                              | 8.0                                                                                | 91.0                                                                                |                                                                                     | 23.0                                                                                | 106.0                                                                               |                                                                                     |
| Total Split (%)         | 7.5%                                                                              | 28.8%                                                                             |                                                                                   | 21.3%                                                                             | 21.3%                                                                             | 21.3%                                                                             | 5.0%                                                                               | 56.9%                                                                               |                                                                                     | 14.4%                                                                               | 66.3%                                                                               |                                                                                     |
| Maximum Green (s)       | 8.0                                                                               | 42.0                                                                              |                                                                                   | 30.0                                                                              | 30.0                                                                              | 30.0                                                                              | 4.0                                                                                | 87.0                                                                                |                                                                                     | 19.0                                                                                | 102.0                                                                               |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                                | 3.5                                                                                 |                                                                                     | 3.5                                                                                 | 3.5                                                                                 |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                                | 0.5                                                                                 |                                                                                     | 0.5                                                                                 | 0.5                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Lead/Lag                | Lead                                                                              |                                                                                   |                                                                                   | Lag                                                                               | Lag                                                                               | Lag                                                                               | Lead                                                                               | Lag                                                                                 |                                                                                     | Lead                                                                                | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                                | Yes                                                                                 |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              | None                                                                              | None                                                                               | C-Max                                                                               |                                                                                     | None                                                                                | C-Max                                                                               |                                                                                     |
| Walk Time (s)           |                                                                                   | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   | 11.0                                                                              |                                                                                   | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              |                                                                                    | 11.0                                                                                |                                                                                     |                                                                                     | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Act Effect Green (s)    | 41.3                                                                              | 41.3                                                                              |                                                                                   | 29.3                                                                              | 29.3                                                                              | 29.3                                                                              | 92.1                                                                               | 87.8                                                                                |                                                                                     | 110.7                                                                               | 105.9                                                                               |                                                                                     |
| Actuated g/C Ratio      | 0.26                                                                              | 0.26                                                                              |                                                                                   | 0.18                                                                              | 0.18                                                                              | 0.18                                                                              | 0.58                                                                               | 0.55                                                                                |                                                                                     | 0.69                                                                                | 0.66                                                                                |                                                                                     |
| v/c Ratio               | 0.72                                                                              | 0.27                                                                              |                                                                                   | 0.30                                                                              | 0.18                                                                              | 0.98                                                                              | 0.06                                                                               | 0.95                                                                                |                                                                                     | 0.96                                                                                | 0.48                                                                                |                                                                                     |
| Control Delay           | 66.1                                                                              | 47.0                                                                              |                                                                                   | 60.3                                                                              | 56.5                                                                              | 75.0                                                                              | 10.4                                                                               | 38.2                                                                                |                                                                                     | 100.1                                                                               | 10.6                                                                                |                                                                                     |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Delay             | 66.1                                                                              | 47.0                                                                              |                                                                                   | 60.3                                                                              | 56.5                                                                              | 75.0                                                                              | 10.4                                                                               | 38.2                                                                                |                                                                                     | 100.1                                                                               | 10.6                                                                                |                                                                                     |
| LOS                     | E                                                                                 | D                                                                                 |                                                                                   | E                                                                                 | E                                                                                 | E                                                                                 | B                                                                                  | D                                                                                   |                                                                                     | F                                                                                   | B                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   | 59.4                                                                              |                                                                                   |                                                                                   | 71.0                                                                              |                                                                                   |                                                                                    | 37.9                                                                                |                                                                                     |                                                                                     | 26.9                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | E                                                                                 |                                                                                   |                                                                                   | E                                                                                 |                                                                                   |                                                                                    | D                                                                                   |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 41 (26%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.98

Intersection Signal Delay: 40.6

Intersection LOS: D

Intersection Capacity Utilization 92.1%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 2: Thompson Bridge & Enota



Thompson Bridge / Enota Convenience  
3: Riverside & Enota

future p.m.

| Intersection              |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Intersection Delay, s/veh | 66.5 |      |      |      |      |      |      |      |      |      |      |      |
| Intersection LOS          | F    |      |      |      |      |      |      |      |      |      |      |      |
| Movement                  | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
| Vol, veh/h                | 0    | 73   | 331  | 12   | 0    | 28   | 337  | 116  | 0    | 24   | 363  | 39   |
| Peak Hour Factor          | 0.92 | 0.91 | 0.91 | 0.91 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles, %         | 2    | 1    | 1    | 1    | 2    | 1    | 1    | 1    | 2    | 1    | 1    | 1    |
| Mvmt Flow                 | 0    | 80   | 364  | 13   | 0    | 30   | 366  | 126  | 0    | 25   | 382  | 41   |
| Number of Lanes           | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB | WB   | NB   |
|----------------------------|----|------|------|
| Opposing Approach          | WB | EB   | SB   |
| Opposing Lanes             | 1  | 1    | 1    |
| Conflicting Approach Left  | SB | NB   | EB   |
| Conflicting Lanes Left     | 1  | 1    | 1    |
| Conflicting Approach Right | NB | SB   | WB   |
| Conflicting Lanes Right    | 1  | 1    | 1    |
| HCM Control Delay          | 73 | 72.3 | 72.7 |
| HCM LOS                    | F  | F    | F    |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 6%    | 18%   | 6%    | 38%   |
| Vol Thru, %            | 85%   | 80%   | 70%   | 42%   |
| Vol Right, %           | 9%    | 3%    | 24%   | 20%   |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 426   | 416   | 481   | 166   |
| LT Vol                 | 24    | 73    | 28    | 63    |
| Through Vol            | 363   | 331   | 337   | 70    |
| RT Vol                 | 39    | 12    | 116   | 33    |
| Lane Flow Rate         | 448   | 457   | 523   | 202   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 1     | 1     | 1     | 0.538 |
| Departure Headway (Hd) | 8.305 | 8.379 | 8.228 | 9.569 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 435   | 434   | 444   | 379   |
| Service Time           | 6.37  | 6.431 | 6.28  | 7.571 |
| HCM Lane V/C Ratio     | 1.03  | 1.053 | 1.178 | 0.533 |
| HCM Control Delay      | 72.7  | 73    | 72.3  | 23.2  |
| HCM Lane LOS           | F     | F     | F     | C     |
| HCM 95th-tile Q        | 12.7  | 12.7  | 12.8  | 3.1   |

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**Intersection**

Intersection Delay, s/veh

Intersection LOS

| Movement          | SBU  | SBL  | SBT  | SBR  |
|-------------------|------|------|------|------|
| Vol, veh/h        | 0    | 63   | 70   | 33   |
| Peak Hour Factor  | 0.92 | 0.82 | 0.82 | 0.82 |
| Heavy Vehicles, % | 2    | 1    | 1    | 1    |
| Mvmt Flow         | 0    | 77   | 85   | 40   |
| Number of Lanes   | 0    | 0    | 1    | 0    |

**Approach** SB

|                            |      |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 23.2 |
| HCM LOS                    | C    |

**Lane**

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## Thompson Bridge / Enota Convenience

## 4: GA 11 Bus &amp; South Enota

future p.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | NBL                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                               | SBR                                                                               | SEL                                                                                | SET                                                                                 | SER                                                                                 | NWL                                                                                 | NWT                                                                                 | NWR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |  |  |  |
| Volume (vph)               | 19                                                                                | 620                                                                               | 51                                                                                | 112                                                                               | 614                                                                               | 267                                                                               | 247                                                                                | 153                                                                                 | 31                                                                                  | 251                                                                                 | 365                                                                                 | 376                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                               | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 200                                                                               |                                                                                   | 0                                                                                 | 200                                                                               |                                                                                   | 0                                                                                 | 300                                                                                |                                                                                     | 0                                                                                   | 400                                                                                 |                                                                                     | 400                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                 |                                                                                     |                                                                                     | 25                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.989                                                                             |                                                                                   |                                                                                   | 0.955                                                                             |                                                                                   |                                                                                    | 0.975                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1787                                                                              | 1844                                                                              | 0                                                                                 | 1787                                                                              | 1784                                                                              | 0                                                                                 | 1787                                                                               | 1834                                                                                | 0                                                                                   | 1787                                                                                | 1881                                                                                | 1599                                                                                |
| Flt Permitted              | 0.053                                                                             |                                                                                   |                                                                                   | 0.097                                                                             |                                                                                   |                                                                                   | 0.104                                                                              |                                                                                     |                                                                                     | 0.413                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 100                                                                               | 1844                                                                              | 0                                                                                 | 182                                                                               | 1784                                                                              | 0                                                                                 | 196                                                                                | 1834                                                                                | 0                                                                                   | 777                                                                                 | 1881                                                                                | 1599                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 22                                                                                |                                                                                   |                                                                                    | 6                                                                                   |                                                                                     |                                                                                     |                                                                                     | 389                                                                                 |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 30                                                                                  |                                                                                     |                                                                                     |                                                                                     | 30                                                                                  |
| Link Distance (ft)         |                                                                                   | 494                                                                               |                                                                                   |                                                                                   | 509                                                                               |                                                                                   |                                                                                    | 1007                                                                                |                                                                                     |                                                                                     |                                                                                     | 495                                                                                 |
| Travel Time (s)            |                                                                                   | 11.2                                                                              |                                                                                   |                                                                                   | 11.6                                                                              |                                                                                   |                                                                                    | 22.9                                                                                |                                                                                     |                                                                                     |                                                                                     | 11.3                                                                                |
| Peak Hour Factor           | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.80                                                                               | 0.80                                                                                | 0.80                                                                                | 0.88                                                                                | 0.88                                                                                | 0.88                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 2%                                                                                | 1%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                | 1%                                                                                 | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 21                                                                                | 681                                                                               | 56                                                                                | 126                                                                               | 690                                                                               | 300                                                                               | 309                                                                                | 191                                                                                 | 39                                                                                  | 285                                                                                 | 415                                                                                 | 427                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 21                                                                                | 737                                                                               | 0                                                                                 | 126                                                                               | 990                                                                               | 0                                                                                 | 309                                                                                | 230                                                                                 | 0                                                                                   | 285                                                                                 | 415                                                                                 | 427                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                               | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                    | 12                                                                                  |                                                                                     |                                                                                     |                                                                                     | 12                                                                                  |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     |                                                                                     | 0                                                                                   |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                    | 16                                                                                  |                                                                                     |                                                                                     |                                                                                     | 16                                                                                  |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                 |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                | Right                                                                               |
| Leading Detector (ft)      | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                 | 100                                                                                 |                                                                                     | 20                                                                                  | 100                                                                                 | 20                                                                                  |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                 | 6                                                                                   |                                                                                     | 20                                                                                  | 6                                                                                   | 20                                                                                  |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(ft)    |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                    | 94                                                                                  |                                                                                     |                                                                                     |                                                                                     | 94                                                                                  |
| Detector 2 Size(ft)        |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                    | 6                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                             | NA                                                                                |                                                                                   | pm+pt                                                                              | NA                                                                                  |                                                                                     | pm+pt                                                                               | NA                                                                                  | Free                                                                                |
| Protected Phases           |                                                                                   | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 |                                                                                   | 7                                                                                  | 4                                                                                   |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     |
| Permitted Phases           | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 4                                                                                  |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     | Free                                                                                |

# Thompson Bridge / Enota Convenience

## 4: GA 11 Bus & South Enota

future p.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | NBL                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                               | SBR                                                                               | SEL                                                                                | SET                                                                                 | SER                                                                                 | NWL                                                                                 | NWT                                                                                 | NWR                                                                                 |
| Detector Phase          | 2                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 |                                                                                   | 7                                                                                  | 4                                                                                   |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              |                                                                                   | 8.0                                                                               | 20.0                                                                              |                                                                                   | 8.0                                                                                | 20.0                                                                                |                                                                                     | 8.0                                                                                 | 20.0                                                                                |                                                                                     |
| Total Split (s)         | 78.0                                                                              | 78.0                                                                              |                                                                                   | 14.0                                                                              | 92.0                                                                              |                                                                                   | 27.0                                                                               | 41.0                                                                                |                                                                                     | 27.0                                                                                | 41.0                                                                                |                                                                                     |
| Total Split (%)         | 48.8%                                                                             | 48.8%                                                                             |                                                                                   | 8.8%                                                                              | 57.5%                                                                             |                                                                                   | 16.9%                                                                              | 25.6%                                                                               |                                                                                     | 16.9%                                                                               | 25.6%                                                                               |                                                                                     |
| Maximum Green (s)       | 74.0                                                                              | 74.0                                                                              |                                                                                   | 10.0                                                                              | 88.0                                                                              |                                                                                   | 23.0                                                                               | 37.0                                                                                |                                                                                     | 23.0                                                                                | 37.0                                                                                |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                                | 3.5                                                                                 |                                                                                     | 3.5                                                                                 | 3.5                                                                                 |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                                | 0.5                                                                                 |                                                                                     | 0.5                                                                                 | 0.5                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Lead/Lag                | Lag                                                                               | Lag                                                                               |                                                                                   | Lead                                                                              |                                                                                   |                                                                                   | Lead                                                                               | Lag                                                                                 |                                                                                     | Lead                                                                                | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      | Yes                                                                               | Yes                                                                               |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                                | Yes                                                                                 |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | C-Max                                                                             | C-Max                                                                             |                                                                                   | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                               | None                                                                                |                                                                                     | None                                                                                | None                                                                                |                                                                                     |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              |                                                                                   |                                                                                   | 11.0                                                                              |                                                                                   |                                                                                    | 11.0                                                                                |                                                                                     |                                                                                     | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Act Effect Green (s)    | 75.0                                                                              | 75.0                                                                              |                                                                                   | 88.4                                                                              | 88.4                                                                              |                                                                                   | 60.8                                                                               | 38.3                                                                                |                                                                                     | 57.8                                                                                | 36.6                                                                                | 160.0                                                                               |
| Actuated g/C Ratio      | 0.47                                                                              | 0.47                                                                              |                                                                                   | 0.55                                                                              | 0.55                                                                              |                                                                                   | 0.38                                                                               | 0.24                                                                                |                                                                                     | 0.36                                                                                | 0.23                                                                                | 1.00                                                                                |
| v/c Ratio               | 0.45                                                                              | 0.85                                                                              |                                                                                   | 0.65                                                                              | 0.99                                                                              |                                                                                   | 1.02                                                                               | 0.52                                                                                |                                                                                     | 0.69                                                                                | 0.97                                                                                | 0.27                                                                                |
| Control Delay           | 65.1                                                                              | 48.8                                                                              |                                                                                   | 33.9                                                                              | 61.7                                                                              |                                                                                   | 103.8                                                                              | 56.7                                                                                |                                                                                     | 44.4                                                                                | 96.2                                                                                | 0.4                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 65.1                                                                              | 48.8                                                                              |                                                                                   | 33.9                                                                              | 61.7                                                                              |                                                                                   | 103.8                                                                              | 56.7                                                                                |                                                                                     | 44.4                                                                                | 96.2                                                                                | 0.4                                                                                 |
| LOS                     | E                                                                                 | D                                                                                 |                                                                                   | C                                                                                 | E                                                                                 |                                                                                   | F                                                                                  | E                                                                                   |                                                                                     | D                                                                                   | F                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 49.2                                                                              |                                                                                   |                                                                                   | 58.5                                                                              |                                                                                   |                                                                                    | 83.7                                                                                |                                                                                     |                                                                                     | 46.8                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | E                                                                                 |                                                                                   |                                                                                    | F                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.02

Intersection Signal Delay: 56.6

Intersection LOS: E

Intersection Capacity Utilization 98.1%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 4: GA 11 Bus & South Enota

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| ø1                                                                                  | ø2 (R)                                                                              |                                                                                     | ø3                                                                                  | ø4                                                                                    |                                                                                       |
| 14 s                                                                                | 78 s                                                                                |                                                                                     | 27 s                                                                                | 41 s                                                                                  |                                                                                       |
|  |  |  |  |  |  |
| ø6 (R)                                                                              |                                                                                     |                                                                                     | ø7                                                                                  | ø8                                                                                    |                                                                                       |
| 92 s                                                                                |                                                                                     |                                                                                     | 27 s                                                                                | 41 s                                                                                  |                                                                                       |

Thompson Bridge / Enota Convenience  
5: Green/Thompson Bridge & Holly & GA 11 Bus

future p.m.

|                            |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBR                                                                               | NBL                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                                | SBR                                                                                 | SWL                                                                                 | SWR                                                                                 |
| Lane Configurations        |                                                                                   |  |  |  |  |                                                                                   |  |                                                                                     |  |  |
| Volume (vph)               | 0                                                                                 | 37                                                                                | 49                                                                                | 1508                                                                              | 693                                                                               | 0                                                                                 | 872                                                                                | 133                                                                                 | 411                                                                                 | 231                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                               | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 0                                                                                 | 0                                                                                 | 150                                                                               |                                                                                   | 200                                                                               | 0                                                                                 |                                                                                    | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Lanes              | 0                                                                                 | 1                                                                                 | 1                                                                                 |                                                                                   | 2                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   | 2                                                                                   | 0                                                                                   |
| Taper Length (ft)          | 25                                                                                |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                    |                                                                                     | 25                                                                                  |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                              | 0.88                                                                              | 1.00                                                                              | 0.95                                                                               | 0.95                                                                                | 0.97                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.865                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   | 0.980                                                                              |                                                                                     | 0.946                                                                               |                                                                                     |
| Flt Protected              |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     | 0.969                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1644                                                                              | 1805                                                                              | 3574                                                                              | 2814                                                                              | 0                                                                                 | 3507                                                                               | 0                                                                                   | 3357                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   |                                                                                   | 0.200                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     | 0.969                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1644                                                                              | 380                                                                               | 3574                                                                              | 2814                                                                              | 0                                                                                 | 3507                                                                               | 0                                                                                   | 3357                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 134                                                                               |                                                                                   |                                                                                   | 479                                                                               |                                                                                   | 21                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)           | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                 |                                                                                     | 30                                                                                  |                                                                                     |
| Link Distance (ft)         | 497                                                                               |                                                                                   |                                                                                   | 707                                                                               |                                                                                   |                                                                                   | 3085                                                                               |                                                                                     | 595                                                                                 |                                                                                     |
| Travel Time (s)            | 11.3                                                                              |                                                                                   |                                                                                   | 16.1                                                                              |                                                                                   |                                                                                   | 70.1                                                                               |                                                                                     | 13.5                                                                                |                                                                                     |
| Peak Hour Factor           | 0.92                                                                              | 0.58                                                                              | 0.93                                                                              | 0.93                                                                              | 0.93                                                                              | 0.92                                                                              | 0.87                                                                               | 0.87                                                                                | 0.88                                                                                | 0.88                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 1%                                                                                | 1%                                                                                | 0%                                                                                | 1%                                                                                 | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 0                                                                                 | 64                                                                                | 53                                                                                | 1622                                                                              | 745                                                                               | 0                                                                                 | 1002                                                                               | 153                                                                                 | 467                                                                                 | 262                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 64                                                                                | 53                                                                                | 1622                                                                              | 745                                                                               | 0                                                                                 | 1155                                                                               | 0                                                                                   | 729                                                                                 | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                               | Right                                                                               | Left                                                                                | Right                                                                               |
| Median Width(ft)           | 0                                                                                 |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                 |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                  |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                 |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                    | 9                                                                                   | 15                                                                                  | 9                                                                                   |
| Number of Detectors        |                                                                                   | 1                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 |                                                                                   | 2                                                                                  |                                                                                     | 1                                                                                   |                                                                                     |
| Detector Template          |                                                                                   | Right                                                                             | Left                                                                              | Thru                                                                              | Right                                                                             |                                                                                   | Thru                                                                               |                                                                                     | Left                                                                                |                                                                                     |
| Leading Detector (ft)      |                                                                                   | 20                                                                                | 20                                                                                | 100                                                                               | 20                                                                                |                                                                                   | 100                                                                                |                                                                                     | 20                                                                                  |                                                                                     |
| Trailing Detector (ft)     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  |                                                                                     | 0                                                                                   |                                                                                     |
| Detector 1 Position(ft)    |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  |                                                                                     | 0                                                                                   |                                                                                     |
| Detector 1 Size(ft)        |                                                                                   | 20                                                                                | 20                                                                                | 6                                                                                 | 20                                                                                |                                                                                   | 6                                                                                  |                                                                                     | 20                                                                                  |                                                                                     |
| Detector 1 Type            |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                |                                                                                     | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                |                                                                                     | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                |                                                                                     | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(ft)    |                                                                                   |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Size(ft)        |                                                                                   |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                  |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                              |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Turn Type                  |                                                                                   | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              |                                                                                   | NA                                                                                 |                                                                                     | Prot                                                                                |                                                                                     |
| Protected Phases           |                                                                                   |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                  |                                                                                     | 8                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   | 4                                                                                 | 2                                                                                 |                                                                                   | 2                                                                                 |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |

Thompson Bridge / Enota Convenience  
5: Green/Thompson Bridge & Holly & GA 11 Bus

future p.m.



| Lane Group              | EBL | EBR   | NBL   | NBT   | NBR   | SBL | SBT   | SBR | SWL   | SWR |
|-------------------------|-----|-------|-------|-------|-------|-----|-------|-----|-------|-----|
| Detector Phase          |     | 4     | 2     | 2     | 2     |     | 6     |     | 8     |     |
| Switch Phase            |     |       |       |       |       |     |       |     |       |     |
| Minimum Initial (s)     |     | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0   |     | 4.0   |     |
| Minimum Split (s)       |     | 20.0  | 20.0  | 20.0  | 20.0  |     | 20.0  |     | 20.0  |     |
| Total Split (s)         |     | 55.0  | 105.0 | 105.0 | 105.0 |     | 105.0 |     | 55.0  |     |
| Total Split (%)         |     | 34.4% | 65.6% | 65.6% | 65.6% |     | 65.6% |     | 34.4% |     |
| Maximum Green (s)       |     | 51.0  | 101.0 | 101.0 | 101.0 |     | 101.0 |     | 51.0  |     |
| Yellow Time (s)         |     | 3.5   | 3.5   | 3.5   | 3.5   |     | 3.5   |     | 3.5   |     |
| All-Red Time (s)        |     | 0.5   | 0.5   | 0.5   | 0.5   |     | 0.5   |     | 0.5   |     |
| Lost Time Adjust (s)    |     | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0   |     | 0.0   |     |
| Total Lost Time (s)     |     | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0   |     | 4.0   |     |
| Lead/Lag                |     |       |       |       |       |     |       |     |       |     |
| Lead-Lag Optimize?      |     |       |       |       |       |     |       |     |       |     |
| Vehicle Extension (s)   |     | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0   |     | 3.0   |     |
| Recall Mode             |     | None  | C-Max | C-Max | C-Max |     | C-Max |     | None  |     |
| Walk Time (s)           |     | 5.0   | 5.0   | 5.0   | 5.0   |     | 5.0   |     | 5.0   |     |
| Flash Dont Walk (s)     |     | 11.0  | 11.0  | 11.0  | 11.0  |     | 11.0  |     | 11.0  |     |
| Pedestrian Calls (#/hr) |     | 0     | 0     | 0     | 0     |     | 0     |     | 0     |     |
| Act Effect Green (s)    |     | 40.7  | 111.3 | 111.3 | 111.3 |     | 111.3 |     | 40.7  |     |
| Actuated g/C Ratio      |     | 0.25  | 0.70  | 0.70  | 0.70  |     | 0.70  |     | 0.25  |     |
| v/c Ratio               |     | 0.12  | 0.20  | 0.65  | 0.35  |     | 0.47  |     | 0.85  |     |
| Control Delay           |     | 0.5   | 8.9   | 9.6   | 2.0   |     | 29.3  |     | 66.9  |     |
| Queue Delay             |     | 0.0   | 0.0   | 0.9   | 0.0   |     | 0.0   |     | 0.0   |     |
| Total Delay             |     | 0.5   | 8.9   | 10.5  | 2.0   |     | 29.3  |     | 66.9  |     |
| LOS                     |     | A     | A     | B     | A     |     | C     |     | E     |     |
| Approach Delay          |     |       |       | 7.8   |       |     | 29.3  |     | 66.9  |     |
| Approach LOS            |     |       |       | A     |       |     | C     |     | E     |     |

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 23.3

Intersection LOS: C

Intersection Capacity Utilization 67.4%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 5: Green/Thompson Bridge & Holly & GA 11 Bus

|                                                                                            |                                                                                          |
|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
|  p2 (R) |  p4 |
| 105 s                                                                                      | 55 s                                                                                     |
|  p6 (R) |  p8 |
| 105 s                                                                                      | 55 s                                                                                     |

## Thompson Bridge / Enota Convenience

## 6: Green &amp; Ridgewood/driveway

future p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |                                                                                    |  |                                                                                     |                                                                                     |  |                                                                                     |
| Volume (vph)               | 270                                                                               | 8                                                                                 | 21                                                                                | 12                                                                                | 15                                                                                | 5                                                                                 | 24                                                                                 | 1969                                                                                | 11                                                                                  | 0                                                                                   | 1171                                                                                | 80                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                               | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.991                                                                             |                                                                                   |                                                                                   | 0.980                                                                             |                                                                                   |                                                                                    | 0.999                                                                               |                                                                                     |                                                                                     | 0.990                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.957                                                                             |                                                                                   |                                                                                   | 0.981                                                                             |                                                                                   |                                                                                    | 0.999                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1802                                                                              | 0                                                                                 | 0                                                                                 | 1827                                                                              | 0                                                                                 | 0                                                                                  | 3568                                                                                | 0                                                                                   | 0                                                                                   | 3541                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.723                                                                             |                                                                                   |                                                                                   | 0.891                                                                             |                                                                                   |                                                                                    | 0.905                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1361                                                                              | 0                                                                                 | 0                                                                                 | 1659                                                                              | 0                                                                                 | 0                                                                                  | 3232                                                                                | 0                                                                                   | 0                                                                                   | 3541                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 5                                                                                 |                                                                                   |                                                                                    | 1                                                                                   |                                                                                     |                                                                                     | 9                                                                                   |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 30                                                                                  |                                                                                     |                                                                                     | 30                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 511                                                                               |                                                                                   |                                                                                   | 308                                                                               |                                                                                   |                                                                                    | 511                                                                                 |                                                                                     |                                                                                     | 707                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 11.6                                                                              |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                    | 11.6                                                                                |                                                                                     |                                                                                     | 16.1                                                                                |                                                                                     |
| Peak Hour Factor           | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.68                                                                              | 0.68                                                                              | 0.68                                                                              | 0.92                                                                               | 0.92                                                                                | 0.92                                                                                | 0.89                                                                                | 0.89                                                                                | 0.89                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                 | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 297                                                                               | 9                                                                                 | 23                                                                                | 18                                                                                | 22                                                                                | 7                                                                                 | 26                                                                                 | 2140                                                                                | 12                                                                                  | 0                                                                                   | 1316                                                                                | 90                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 329                                                                               | 0                                                                                 | 0                                                                                 | 47                                                                                | 0                                                                                 | 0                                                                                  | 2178                                                                                | 0                                                                                   | 0                                                                                   | 1406                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                               | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                    | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                 |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                 | 100                                                                                 |                                                                                     | 20                                                                                  | 100                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                 | 6                                                                                   |                                                                                     | 20                                                                                  | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(ft)    |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                    | 94                                                                                  |                                                                                     |                                                                                     | 94                                                                                  |                                                                                     |
| Detector 2 Size(ft)        |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                    | 6                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                              | NA                                                                                  |                                                                                     |                                                                                     | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |

# Thompson Bridge / Enota Convenience

## 6: Green & Ridgewood/driveway

future p.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              |                                                                                   | 20.0                                                                              | 20.0                                                                              |                                                                                   | 8.0                                                                                | 20.0                                                                                |                                                                                     | 20.0                                                                                | 20.0                                                                                |                                                                                     |
| Total Split (s)         | 43.0                                                                              | 43.0                                                                              |                                                                                   | 43.0                                                                              | 43.0                                                                              |                                                                                   | 8.0                                                                                | 117.0                                                                               |                                                                                     | 109.0                                                                               | 109.0                                                                               |                                                                                     |
| Total Split (%)         | 26.9%                                                                             | 26.9%                                                                             |                                                                                   | 26.9%                                                                             | 26.9%                                                                             |                                                                                   | 5.0%                                                                               | 73.1%                                                                               |                                                                                     | 68.1%                                                                               | 68.1%                                                                               |                                                                                     |
| Maximum Green (s)       | 39.0                                                                              | 39.0                                                                              |                                                                                   | 39.0                                                                              | 39.0                                                                              |                                                                                   | 4.0                                                                                | 113.0                                                                               |                                                                                     | 105.0                                                                               | 105.0                                                                               |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                                | 3.5                                                                                 |                                                                                     | 3.5                                                                                 | 3.5                                                                                 |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                                | 0.5                                                                                 |                                                                                     | 0.5                                                                                 | 0.5                                                                                 |                                                                                     |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    | 4.0                                                                                 |                                                                                     |                                                                                     | 4.0                                                                                 |                                                                                     |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                                |                                                                                     |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                               | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               |                                                                                     |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                              | 11.0                                                                              |                                                                                   |                                                                                    | 11.0                                                                                |                                                                                     | 11.0                                                                                | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Act Effect Green (s)    |                                                                                   | 39.0                                                                              |                                                                                   |                                                                                   | 39.0                                                                              |                                                                                   |                                                                                    | 113.0                                                                               |                                                                                     |                                                                                     | 113.0                                                                               |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.24                                                                              |                                                                                   |                                                                                   | 0.24                                                                              |                                                                                   |                                                                                    | 0.71                                                                                |                                                                                     |                                                                                     | 0.71                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 0.99                                                                              |                                                                                   |                                                                                   | 0.12                                                                              |                                                                                   |                                                                                    | 0.95                                                                                |                                                                                     |                                                                                     | 0.56                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 105.1                                                                             |                                                                                   |                                                                                   | 43.0                                                                              |                                                                                   |                                                                                    | 32.4                                                                                |                                                                                     |                                                                                     | 14.5                                                                                |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.2                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 105.1                                                                             |                                                                                   |                                                                                   | 43.0                                                                              |                                                                                   |                                                                                    | 32.4                                                                                |                                                                                     |                                                                                     | 14.6                                                                                |                                                                                     |
| LOS                     |                                                                                   | F                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | C                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   | 105.1                                                                             |                                                                                   |                                                                                   | 43.0                                                                              |                                                                                   |                                                                                    | 32.4                                                                                |                                                                                     |                                                                                     | 14.6                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | F                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | C                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.99

Intersection Signal Delay: 32.3

Intersection LOS: C

Intersection Capacity Utilization 101.7%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 6: Green & Ridgewood/driveway

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |  |  |
| 117 s                                                                               |                                                                                     |                                                                                     | 43 s                                                                                |                                                                                     |                                                                                     | 43 s                                                                                |                                                                                     |                                                                                     |
|  |  |  |  |  |  |  |  |  |
| 8 s                                                                                 |                                                                                     |                                                                                     | 109 s                                                                               |                                                                                     |                                                                                     | 43 s                                                                                |                                                                                     |                                                                                     |

Thompson Bridge / Enota Convenience  
7: Thompson Bridge

future p.m.

| Intersection             |        |      |        |      |        |      |
|--------------------------|--------|------|--------|------|--------|------|
| Int Delay, s/veh         | 0.3    |      |        |      |        |      |
|                          |        |      |        |      |        |      |
| Movement                 | EBL    | EBR  | NBL    | NBT  | SBT    | SBR  |
| Vol, veh/h               | 0      | 28   | 37     | 1698 | 1055   | 26   |
| Conflicting Peds, #/hr   | 0      | 0    | 0      | 0    | 0      | 0    |
| Sign Control             | Stop   | Stop | Free   | Free | Free   | Free |
| RT Channelized           | -      | None | -      | None | -      | None |
| Storage Length           | 0      | -    | 0      | -    | -      | -    |
| Veh in Median Storage, # | 0      | -    | -      | 0    | 0      | -    |
| Grade, %                 | 0      | -    | -      | 0    | 0      | -    |
| Peak Hour Factor         | 80     | 80   | 93     | 93   | 92     | 92   |
| Heavy Vehicles, %        | 0      | 0    | 0      | 2    | 2      | 0    |
| Mvmt Flow                | 0      | 35   | 40     | 1826 | 1147   | 28   |
|                          |        |      |        |      |        |      |
| Major/Minor              | Minor2 |      | Major1 |      | Major2 |      |
| Conflicting Flow All     | 2153   | 588  | 1175   | 0    | -      | 0    |
| Stage 1                  | 1161   | -    | -      | -    | -      | -    |
| Stage 2                  | 992    | -    | -      | -    | -      | -    |
| Critical Hdwy            | 6.8    | 6.9  | 4.1    | -    | -      | -    |
| Critical Hdwy Stg 1      | 5.8    | -    | -      | -    | -      | -    |
| Critical Hdwy Stg 2      | 5.8    | -    | -      | -    | -      | -    |
| Follow-up Hdwy           | 3.5    | 3.3  | 2.2    | -    | -      | -    |
| Pot Cap-1 Maneuver       | 42     | 457  | 602    | -    | -      | -    |
| Stage 1                  | 264    | -    | -      | -    | -      | -    |
| Stage 2                  | 324    | -    | -      | -    | -      | -    |
| Platoon blocked, %       |        |      |        | -    | -      | -    |
| Mov Cap-1 Maneuver       | 39     | 457  | 602    | -    | -      | -    |
| Mov Cap-2 Maneuver       | 39     | -    | -      | -    | -      | -    |
| Stage 1                  | 264    | -    | -      | -    | -      | -    |
| Stage 2                  | 302    | -    | -      | -    | -      | -    |
|                          |        |      |        |      |        |      |
| Approach                 | EB     |      | NB     |      | SB     |      |
| HCM Control Delay, s     | 13.5   |      | 0.2    |      | 0      |      |
| HCM LOS                  | B      |      |        |      |        |      |
|                          |        |      |        |      |        |      |
| Minor Lane/Major Mvmt    | NBL    | NBT  | EBLn1  | SBT  | SBR    |      |
| Capacity (veh/h)         | 602    | -    | 457    | -    | -      |      |
| HCM Lane V/C Ratio       | 0.066  | -    | 0.077  | -    | -      |      |
| HCM Control Delay (s)    | 11.4   | -    | 13.5   | -    | -      |      |
| HCM Lane LOS             | B      | -    | B      | -    | -      |      |
| HCM 95th %tile Q(veh)    | 0.2    | -    | 0.2    | -    | -      |      |

**Intersection**

Int Delay, s/veh 1.4

| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
|--------------------------|------|------|------|------|------|------|
| Vol, veh/h               | 267  | 8    | 5    | 99   | 4    | 45   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 84   | 84   | 90   | 90   | 80   | 80   |
| Heavy Vehicles, %        | 1    | 0    | 0    | 1    | 0    | 0    |
| Mvmt Flow                | 318  | 10   | 6    | 110  | 5    | 56   |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |     |
|----------------------|--------|---|--------|---|--------|-----|
| Conflicting Flow All | 0      | 0 | 327    | 0 | 444    | 323 |
| Stage 1              | -      | - | -      | - | 323    | -   |
| Stage 2              | -      | - | -      | - | 121    | -   |
| Critical Hdwy        | -      | - | 4.1    | - | 6.4    | 6.2 |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.4    | -   |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.4    | -   |
| Follow-up Hdwy       | -      | - | 2.2    | - | 3.5    | 3.3 |
| Pot Cap-1 Maneuver   | -      | - | 1244   | - | 575    | 723 |
| Stage 1              | -      | - | -      | - | 738    | -   |
| Stage 2              | -      | - | -      | - | 909    | -   |
| Platoon blocked, %   | -      | - |        | - |        |     |
| Mov Cap-1 Maneuver   | -      | - | 1244   | - | 572    | 723 |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 572    | -   |
| Stage 1              | -      | - | -      | - | 738    | -   |
| Stage 2              | -      | - | -      | - | 904    | -   |

| Approach             | EB | WB  | NB   |
|----------------------|----|-----|------|
| HCM Control Delay, s | 0  | 0.4 | 10.6 |
| HCM LOS              |    |     | B    |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 708   | -   | -   | 1244  | -   |
| HCM Lane V/C Ratio    | 0.087 | -   | -   | 0.004 | -   |
| HCM Control Delay (s) | 10.6  | -   | -   | 7.9   | 0   |
| HCM Lane LOS          | B     | -   | -   | A     | A   |
| HCM 95th %tile Q(veh) | 0.3   | -   | -   | 0     | -   |



# CITY OF GAINESVILLE

## AGENDA REQUEST

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**Date Submitted:** 4/21/2017

**Presenter:** Matt Tate

**Item of Business:** Request from **Montecito Development** for a special use on a 0.80± acre tract located at the southwest side of the intersection of Enota Avenue and Thompson Bridge Road (a/k/a **1281 Thompson Bridge Road, NW**), having a zoning of Neighborhood Business (N-B).

Ward Number: Two

Tax Parcel Number(s): 01-074-004-020

Request: Convenience store with fuel pumps

**Meeting Date:** 5/9/2017

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### **Purpose of Request:**

The applicant is proposing a special use within Neighborhood Business (N-B) zoning and is part of the previous rezoning request to construct a 5,200± square foot convenience store with four pump islands. The property is located within the Gateway Corridor Overlay Zone and contains a parking lot which was previously the location of a Long John Silver's restaurant and a bank teller machine. According to the applicant's concept plan, the subject property would be combined with the adjacent property to the rear and access is proposed from Thompson Bridge Road and Enota Avenue. Surrounding uses include a vacant gas station and store, M & R Rentals & Sales, Burger King, Marco's Pizza, Anderson Physical Therapy Associates and Wells Fargo Bank branch.

### **History/Background:**

### **Facts & Issues for Consideration:**

### **Department Recommendation:**

Planning staff is recommending denial of this request. However, if the Board votes to recommend approval of the request, staff has proposed five conditions of zoning.

### **Department Director:**

Rusty Ligon

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### **If funding is involved, are funds approved within the current budget?**

N/A

### **Amount Requested:**

### **Source of Funds:**

### **Finance Comments:**

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### **Administrative Comments:**

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### **ATTACHMENTS:**

| Description                                       | Type            |
|---------------------------------------------------|-----------------|
| <input type="checkbox"/> Staff Report             | Report          |
| <input type="checkbox"/> Location Maps            | Backup Material |
| <input type="checkbox"/> Narrative                | Backup Material |
| <input type="checkbox"/> Plat                     | Backup Material |
| <input type="checkbox"/> Site Plan                | Backup Material |
| <input type="checkbox"/> Architectural Renderings | Backup Material |



**GAINESVILLE PLANNING and APPEALS BOARD  
STAFF RECOMMENDATION**

**Applicant** ..... Montecito Development  
**Property Owner** ..... James Paul Mallard  
**Location** ..... 149 Enota Avenue; 1281 Thompson Bridge Road NW  
**Request** ..... (0.48± acres parcel) -Rezone from O-I to N-B with a special use  
**Request** ..... (0.80± acres parcel) -Special use request within N-B zoning  
**Ward** ..... Two  
**Proposed Use** ..... Convenience store with fuel pumps  
**Planning Division Staff Recommendation** ..... **Denial**  
**Date** ..... May 9, 2017

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▪ **Applicant's Proposal and Background Information**

The applicant's proposal consists of two applications. The first application proposes to rezone a 0.48± parcel from Office and Institutional (O-I) to Neighborhood Business (N-B) with a special use. The second application proposes a special use for a 0.80± acres parcel zoned Neighborhood Business (N-B).

The purpose of the requests is to combine the two properties to construct a 4,200± to 5,200± square foot convenience store with four pump islands. The proposed store is to include a mixture of brick, stone and stucco materials to meet overlay standards. In addition, the proposed fuel canopy will be improved with a pitched roof and the support poles will be faced with stone material to match the building. According to the applicant's concept plan, a two-way access is proposed from Thompson Bridge Road and from Enota Avenue. The existing driveway on Thompson Bridge Road closest to the intersection will be removed. As well, a portion of the existing vegetation to the rear of the property will be removed to provide for parking. A 25-foot wide buffer is proposed adjacent to the neighboring residential property to the south and a 10-foot buffer is proposed adjacent to the office property to the west.

The property is located within the Gateway Corridor Overlay Zone and the front property contains a parking lot which was previously the location of a Long John Silver's restaurant and a bank teller machine. The rear property contains a parking lot and wooded buffer.

**Adjacent Land Use and Zoning**

| Location | Use                                                                                   | Zoning                                                                    |
|----------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| North    | Burger King; M & R Rentals                                                            | Neighborhood Business (N-B) -City<br>Office and Institutional (O-I) -City |
| South    | Closed gas station / retail store, single-family home                                 | Neighborhood Business (N-B) -City<br>Residential-I (R-I) -City            |
| East     | Marco's Pizza, Anderson Physical Therapy Associates, Public Grocery, Wells Fargo Bank | Neighborhood Business (N-B) -City<br>Regional Business (R-B) -City        |
| West     | Professional office                                                                   | Office and Institutional (O-I) -City                                      |

▪ **Traffic Impact Study Summary**

A Traffic Impact Study was completed for the proposed development on February 23, 2017 and later revised on April 19, 2017 by Marc R. Acampora, PE, LLC Traffic Engineering, at the Thompson Bridge / Enota intersection on Thursday, February 16, 2017. The counts at Thompson Bridge / Walmart, Enota / Riverside, and GA 11 Bus / South Enota were collected on Thursday, March 30, 2017, and the counts at GA 60 / GA 11 Bus and GA 60 / Ridgewood were obtained from another recent traffic study performed in the area, collected on Wednesday, February 22, 2017. Traffic counts were collected from 7:00 A.M to 9:00 A.M. and from 4:30 P.M. to 6:30 P.M.

The only available historic Georgia DOT 24-hour traffic counts were also collected in the vicinity from the year 2015. The annual daily traffic volume on Thompson Bridge Road adjacent to the subject site was 26,500 in 2015 and the AADT on Enota adjacent to the site was 1,760 in 2015.

The study revealed that the peak hour generation for this project was calculated at 153 unadjusted trips or 52 new trips and the 24-hour volume is 4,340 unadjusted trips or 1,574 new trips. The study included the following six intersections.

1. Thompson Bridge Road at Walmart / Taco Bell Access
2. Thompson Bridge Road / Enota Avenue
3. Enota Avenue at Riverside Drive
4. GA 11 Business at South Enota Avenue
5. GA 60 at GA 11 Business
6. GA 60 at Ridgewood Avenue

A summary of the study revealed that future operations, upon the project being fully constructed and operational, will operate at acceptable levels at the intersection of Thompson Bridge Road and Enota Avenue as well as both the both proposed site access locations. Additionally, the Traffic Engineer states that gas station and convenience store would generate less traffic during peak hours than a fast food restaurant would.

**Thompson Bridge Road and Enota Avenue**

The analysis of the Thompson Bridge / Enota intersection shows an overall acceptable level of service in both the existing and future conditions. The side street approaches on Enota Avenue operate at LOS E, primarily due to the green time on the signal favoring the Thompson Bridge Road approaches. 1) Shorter cycle lengths would reduce delays and side street queuing. While there are crosswalks and pedestrian signals on all approaches at this signalized intersection, only the northeast corner has an ADA accessible ramp. 2) Consideration should be given to adding ADA ramps on the remaining corners. 3) The crosswalk and stop bar striping is also in poor condition and should be refreshed.

**Thompson Bridge Road at Site Access**

The site plan calls for the elimination of two of the three existing site accesses on Thompson Bridge Road. This will reduce the number of conflict points. It is likely that most vehicles that wish to travel either northbound on Thompson Bridge or to the east on Enota will exit the site at the Enota driveway and capitalize on the protection of the adjacent signal. Because of the difficulty in making this left turn from the site driveway, and the low numbers of vehicles expected to do so, 1) consideration should be given to prohibiting exiting left turns from this driveway. 2) The Georgia DOT access standards were reviewed for this intersection (Thompson Bridge is Georgia State Route 60) and indicate that the access justifies a southbound exclusive right turn lane. The spacing of this driveway from Enota Avenue does not meet the minimum Georgia DOT driveway spacing standards. It is recommended that these

design factors be discussed with Georgia DOT and the City to determine an acceptable solution. 3) The Thompson Bridge Road site access should be constructed with one entering and one exiting lane and the exiting approach should be controlled by stop sign and accompanying stop bar. The project site engineer is referred to the Georgia DOT Driveway Manual for other driveway design standards including driveway width, island design, and curb return radii.

### **Enota Avenue at Site Access**

The site access on Enota is projected to operate with low volumes and very low delays. Most of the site entering trips will enter at the Thompson Bridge access, so that the entering left turns at the Enota driveway are projected at only 6 vehicles in the a.m. peak hour and 5 in the p.m. peak hour. This should minimally impede westbound through flow on Enota. The eastbound right turns entering the site are also minimal, at 5 for the a.m. peak hour and 8 for the p.m. peak hour. This also should minimally impede flows on Enota. 1) The Enota Avenue site access should be constructed with one entering and one exiting lane and the exiting approach should be controlled by stop sign and accompanying stop bar. 2) The existing grade differential between the site and Enota Avenue at the location of the site access should be corrected when the site is developed.

### ▪ **Other Departmental Comments**

According to the Georgia Department of Transportation (GDOT), the development will be required to meet the sight distance requirements and will need to coordinate with GDOT for review and approval.

According to the Gainesville Public Works Department, the developer will need to coordinate with the Gainesville Public Works Department and the Georgia Department of Transportation (GDOT) prior to permitting to address the future traffic improvements at the intersection of Thompson Bridge Road and Enota Avenue.

### ▪ **Zoning History**

*The following zoning actions have taken place in the immediate area during the last ten years:*

**2016** - A request by Jack Bailey to rezone a 0.61<sup>±</sup> acre tract located at 1665 Thompson Bridge Road NW from Residential-I (R-I) to Office and Institutional (O-I) was approved with conditions for an insurance office.

**2016** - A request by Teresa Vickers for a special use for a hair salon within the Office and Institutional (O-I) zoning district located at 977 and 983 Enota Avenue was approved with conditions.

**2015** - A request by David P. Johnson to rezone a 1.458<sup>±</sup> acres tract located at 1537 and 1551 Thompson Bridge Road; and 135 Virginia Circle from Residential-I (R-I) to Neighborhood Business (N-B) with a special use for restaurant with drive-thru and retail was denied.

**2014** – A request by Polestar Development, LLC to rezone a 1.741<sup>±</sup> acres tract located at 1435 Thompson Bridge Road from Residential-II (R-II) to Regional Business (R-B) for a grocery store and fuel service station was approved with conditions.

**2013** - A request by Michael Slate to rezone a 0.67<sup>±</sup> acre tract located at 971 Lanier Avenue NE from Residential-I (R-I) to Residential and Office (R-O) for a professional office was approved with conditions.

**2012** - A request by WAG Properties, Inc. to annex a 0.68<sup>±</sup> acre tract located at 1868 Thompson Bridge Road for a transportation logistics brokerage was approved with General Business (G-B) zoning.

**2011** - A request by Greg Loyd for a special use for a Dunkin Donut restaurant with a drive thru within the Neighborhood Business (N-B) zoning district located at 1151 Thompson Bridge Road was approved with conditions.

**2011** - A request by Jamie Collins to rezone a 1.149<sup>±</sup> acres tract located at 1452, 1464 and 1472 Thompson Bridge Road NE from Residential-I (R-I) and Neighborhood Business (N-B) to General Business (G-B) for a Taco Bell restaurant was approved with conditions.

**2011** - A request by One Eleven, LLC for a special use for the Little Yellow Coffee House with a drive-thru within the Neighborhood Business (N-B) zoning district located at 996 Thompson Bridge Road was approved with conditions.

**2010** - A request by Pam Abernathy for a special use for a single-family residence within the Office and Institutional (O-I) zoning district located at 1745 Thompson Bridge Road was approved with conditions.

**2010** - A request by Yonah Burger for a special use for a restaurant with a drive-thru within the Neighborhood Business (N-B) zoning district located at 1191 and 1195 Thompson Bridge Road was approved with conditions.

**2009** - A request by Lakewood Baptist Church to rezone a 39.53<sup>±</sup> acres tract located at 2235 Thompson Bridge Road from Residential-I (R-I), Residential-II (R-II) and General Business (G-B) to Planned Unit Development (P-U-D) for future expansion of the church was approved with conditions.

**2009** - A request by Danny Dunagan to annex a 0.89<sup>±</sup> acre tract located at 309 Linwood Road for a 46-unit mini-storage facility was approved with General Business (G-B) zoning.

**2009** - A request by Frenil R. Adajania to rezone a 0.20<sup>±</sup> acre tract located at 0 Thompson Bridge Road from Planned Unit Development (P-U-D) to General Business (G-B) for an existing access driveway was approved.

**2009** - A request by Frenil Adajania to annex a 0.48<sup>±</sup> acre tract located at 1878 Thompson Bridge Road for an existing gas station/convenience store was approved with General Business (G-B) zoning.

**2008** - A request by Danny Allen to rezone a 0.77<sup>±</sup> acre tract located at 1770 and 1786 Thompson Bridge Road from Residential-I (R-I) to Residential and Office (R-O) for residential and office uses was approved with conditions.

**2007** - A request by Lee Dempsey to rezone a 1.5<sup>±</sup> acres tract located at 2200 and 2234 Thompson Bridge Road; and 924 and 934 Etta Vista Circle from Residential-I (R-I) and Residential and Office (R-O) to Neighborhood Business (N-B) with a special use for office/commercial mixed-use development was approved with conditions.

**2007** - A request by Mike Weaver to rezone a 0.6<sup>±</sup> acre tract located at 1750 Thompson Bridge Road from Residential-I (R-I) to Residential and Office (R-O) for an attorney's office was approved with conditions. This request was approved after two previous attempts to rezone the subject property were denied.

**2007** - A request by Ken Selzer to rezone 0.814<sup>±</sup> acre from Residential-I (R-I) to Residential and Office (R-O) for residential and office uses at 1143, 1153, and 1167 Green Street Circle

was denied by the Planning and Appeals Board and the request was withdrawn during City Council first reading.

▪ **Staff Analysis**

**(1) Is the proposed use suitable in view of the zoning and development of adjacent and nearby property?**

The adjacent and nearby uses include single-family residential homes, office, service and commercial uses and are zoned Residential-I (R-I), Residential-II (R-II), Office and Institutional (O-I), Neighborhood Business (N-B) and Regional Business (R-B). The applicants proposed development area extends westerly along Enota Drive toward an established residential district. It appears that the proposed zoning of Neighborhood Business (N-B) may be suitable for neighborhood scale retail uses; however, the addition of fuel pumps is more aggressive.

**(2) Will the proposed use adversely affect the existing use or usability of adjacent or nearby property?**

It is staffs opinion that the proposal would have less of an impact to the surrounding area if the development were confined to the front 0.80± acres parcel and limited to the convenience retail store without fuel sales. However, Neighborhood Business (N-B) zoning could be considered for the rear parcel but should not be combined with the front parcel for the purpose of increasing the developable area to add fuel pumps. The addition of fuel pumps will increase turning movements along Thompson Bridge Road and Enota Avenue at a higher rate compared to a professional office or specialty retail store. The properties most impacted by the proposal appear to be the nearby single-family homes as convenience stores typically have longer business hours create more noise from traffic, fuel/delivery trucks and dumpster usage. The applicant does propose a 25-foot vegetated buffer adjacent to the single-family property.

**(3) Is the proposed use compatible with the purpose and intent of the Comprehensive Plan?**

The proposed development is located within the *Retail/Commercial* land use category. The *Retail/Commercial* land use category includes commercial service activities such as grocery stores, banks, restaurants, theatres, hotels, and automotive related businesses. Commercial uses may be located as a single use in one building or grouped together in a shopping center.

According to the Character Area map for the City of Gainesville, the rear 0.48± acre portion of the subject property is located within the *Traditional Neighborhoods* Character Area, specifically within the *Northern Neighborhoods subarea*. The front 0.80± acre portion of the subject property is located within the *City Park Neighborhood Center* Character Area.

The vision for the *Traditional Neighborhood Character Area* anticipates minimal change, and primary issues within this subarea include incompatible infill development and the threat of encroaching urban sprawl. Commercial encroachment should be minimized and should respect and mirror the small scale of the surrounding neighborhoods, while the purity of the landscape and quality of housing should be preserved. The area is not a primary destination for business; however neighborhood serving business development is encouraged. Land uses allowed include low-density and medium-density residential, and mixed-use / commercial.

The vision for the *City Park Neighborhood Center* Character Area states that Thompson Bridge Road should be transformed into a "Complete Street" with sidewalks, landscaping, bike lanes and transit stops. Preservation of local small businesses should be a priority, and key early commercial buildings targeted for preservation. New commercial development should be compatible with the small scale of the older structures, and parking should be located to the rear with inter-parcel connectivity where possible. The area is not anticipated to see major

economic growth, but remain oriented toward addressing existing neighborhood needs. Businesses providing basic goods and services that neighborhood residents depend on in daily life (for example food, household supplies, medicine etc.) should be encouraged. Locally-owned / family-owned businesses should be promoted to encourage small business investment / entrepreneurship. Land uses allowed include mixed-use, commercial and public/Institutional.

**(4) Are there substantial reasons why the property cannot or should not be used as currently zoned?**

The applicant proposes to rezone a 0.48± parcel from Office and Institutional (O-I) to Neighborhood Business (N-B) with a special use. The second application proposes a special use for a 0.80± acres parcel zoned Neighborhood Business (N-B). The N-B zoning district allows for commercial uses such as a convenience store but does not permit fuel pumps without special use approval. Most of the uses permitted within the Neighborhood Business (N-B) zoning district are not auto-oriented in nature. It appears reasonable that both parcels could be combined or developed separately for those uses currently permitted within the Neighborhood Business (N-B) zoning district.

**(5) Will the proposed use cause an excessive or burdensome use of public facilities or services, including but not limited to streets, schools, water or sewer utilities, and police or fire protection?**

City water, sewer and public safety services are currently provided to the property. Gainesville Fire Station #2 is located off of Holly Drive and is approximately 0.8± miles from the subject property.

The proposed use would have no impact on the school system given that it is a non-residential use.

The proposal will increase ingress and egress traffic movements along Thompson Bridge Road which typically experiences high southbound traffic volumes in the morning and high northbound traffic volumes in the evening. The subject property is located at the southeast corner of Thompson Bridge Road and Enota Avenue. According to the Transportation Master Plan for this area, there are planned intersection improvements which will include the addition of a dedicated right turn lane.

**(6) Is the proposed use supported by new or changing conditions not anticipated by the Comprehensive Plan or reflected in the existing zoning on the property or surrounding properties?**

Commercial growth has occurred along this segment of Thompson Bridge Road since the early-mid 1980's consisting of shopping center development, restaurant, retail, bank, personal service establishments and office uses which are consistent with the proposal. It is anticipated that neighborhood scale commercial growth will continue to occur for property fronting Thompson Bridge Road. There are currently four gas stations within a mile of the subject property, not including the closed gas station adjacent to the subject property.

**(7) Does the proposed use reflect a reasonable balance between the promotion of the public health, safety, morality, or general welfare and the right to unrestricted use of property?**

Based on the Comprehensive Plan and the adjacent Neighborhood Business (N-B) zoning, the proposed rezoning portion of the request appears to reflect a reasonable balance between the promotion of the public health, safety, morality, or general welfare and the right to unrestricted use of property. However, the proposed special use to allow for fueling station does not reflect a balance.



---

### **Additional Criteria**

- (1) The type of street providing access to the subject property is adequate to serve the proposed Special Use.**

Thompson Bridge Road (SR 60) is an arterial road and Enota Avenue is a local connector road. Both roads are adequate to serve the proposed use but will require improvements including a dedicated right turn decel lane. The addition of these lanes may require the proposed buildings and parking to shift to account for change.

- (2) Access into and out of the property adequately provides for traffic and pedestrian safety, the anticipated volume of traffic flow, and access by emergency vehicles.**

The subject property is located at the southwest corner of Thompson Bridge Road and Enota Avenue which currently presents somewhat challenging turning movements into the subject property. Pedestrian crosswalks are present but are not ADA compliant. The applicant's concept plan appears to provide for sufficient access for emergency vehicles with some modifications.

- (3) Public facilities such as schools, water or sewer utilities, and police or fire protection are adequate to serve the Special Use.**

Existing public facilities are adequate to serve the proposed use.

- (4) Refuse, service, parking and loading areas on the property are located and screened to protect other properties in the area from such adverse effects as noise, light, glare or odor.**

The proposed concept plan includes a 25-foot wide landscape buffer adjacent to the single-family property and a 10-foot wide landscape buffer adjacent to the existing office use. The proposed dumpster is to be located behind the proposed building adjacent to the residential property.

- (5) The hours and manner of operation of the Special Use have no adverse effects on other properties in the area.**

The applicant states the proposed hours of operation are for the store to remain open 24 hours a day. An alternative schedule could be from 5 a.m. to 12 a.m. which would reduce the impact somewhat on the adjacent and nearby residential homes. These hours of operation would be in direct conflict with the neighboring residential properties.

- (6) The height, size and location of the buildings or other structures proposed on the property are compatible with the height, size or location of buildings or other structures on neighboring properties.**

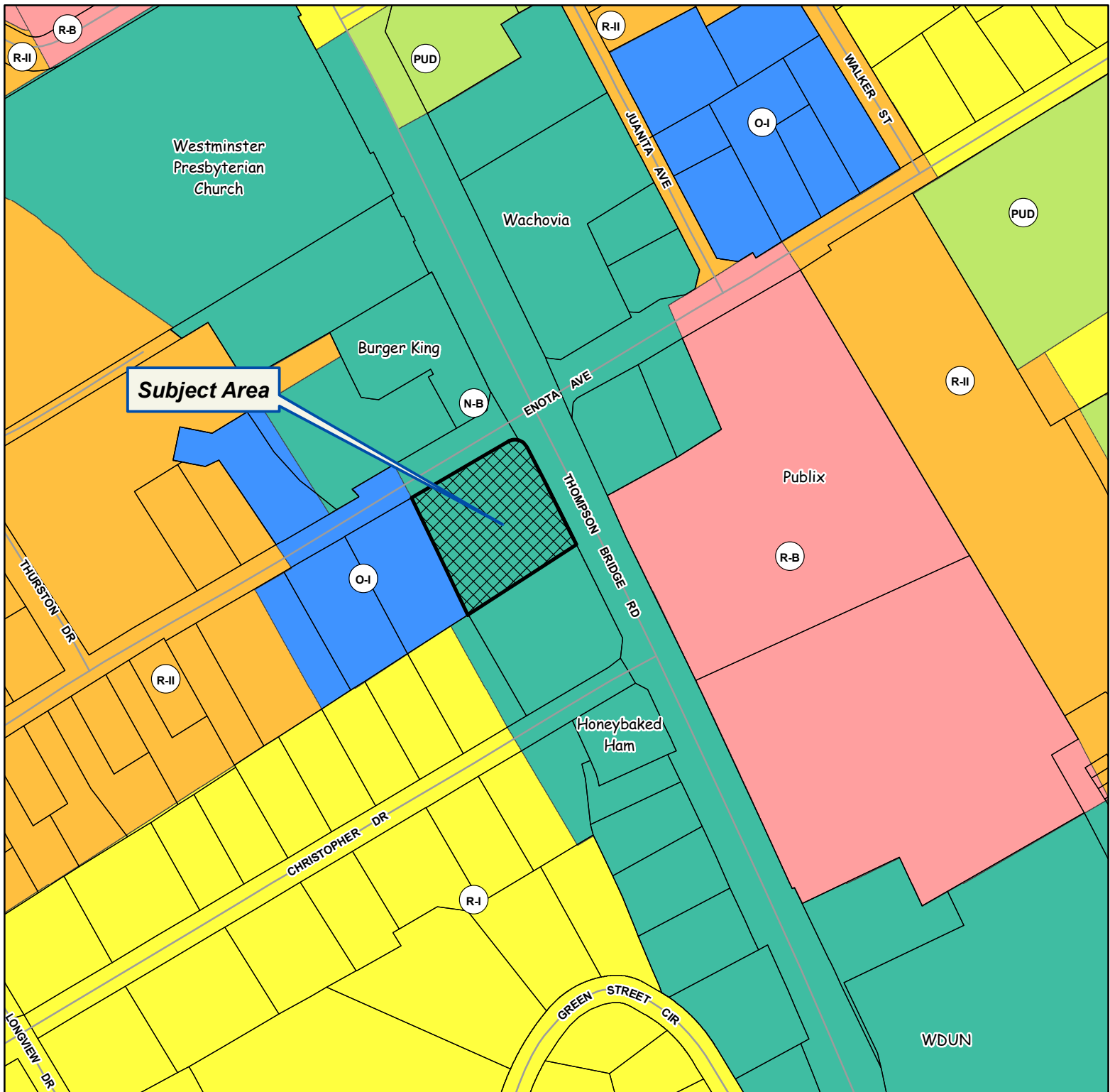
The height, size and location of the proposed structures appear consistent with other commercial structures located along Thompson Bridge Road. The adjacent vacant property to the south currently has a fuel island canopy very close to Thompson Bridge Road at a higher elevation. If approved, there will be two fuel island canopies in close proximity to one another.

▪ **Staff Recommendation**

The Planning Division staff is recommending **denial** of this request based on the Comprehensive Plan and the adjacent residential uses. However, if the Planning and Appeals Board were to recommend approval of this request, staff would recommend the following conditions:

**Conditions**

1. The exterior materials and roof pitch of the building and canopy shall adhere to the standards as depicted on the architectural elevation provided with this rezoning application.
2. The hours of operation for the proposed use shall not exceed 5 a.m. to 12 a.m.
3. All access point design along the portion of Thompson Bridge Road and Enota Avenue in front of the property shall require approval by the Georgia Department of Transportation in conjunction with the Gainesville Public Works Director. All required access / traffic / sidewalk improvements associated with the proposed development shall be at the full expense of the developer / property owner.
4. The applicant / owner shall provide for internal parcel vehicular access with the adjacent vacant property located to the south.
5. An updated as-built boundary survey / plat of the subject property, indicating all improvements required for the proposed use, shall be recorded prior to obtaining a Certificate of Occupancy.



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Applicant:<br><h2 style="text-align: center; margin: 0;">MONTECITO DEVELOPMENT</h2>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | <b>Gainesville Community Development Department</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |
| <h3 style="margin: 0;">SPECIAL USE REQUEST</h3>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  | <div style="display: flex; align-items: center; margin-bottom: 10px;"> <div style="width: 30px; height: 20px; border: 1px solid black; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); margin-right: 5px;"></div> <span>Subject Area</span> </div> <div style="text-align: right;"> <div style="text-align: center;"> <div style="font-size: 2em; margin: 0;">N</div> </div> <div style="display: flex; align-items: center; margin-top: 5px;"> <div style="flex-grow: 1; border-bottom: 1px solid black; position: relative;"> <div style="position: absolute; left: 0; bottom: -5px;">0</div> <div style="position: absolute; right: 0; bottom: -5px;">Feet</div> <div style="position: absolute; left: 20%; bottom: -5px;">120</div> <div style="position: absolute; left: 40%; bottom: -5px;">240</div> <div style="position: absolute; left: 60%; bottom: -5px;">360</div> <div style="position: absolute; left: 80%; bottom: -5px;">480</div> </div> </div> <div style="margin-top: 5px;">             1" = 200'           </div> </div> |  |
| <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> </div> <div> <b>Request:</b><br/>             Special Use within the Neighborhood Business (N-B) zoning district (0.80+/- acre tract), for a convenience store with fuel pumps           </div> <div style="border-top: 1px solid black; padding-top: 5px;"> <b>Subject Area Address:</b><br/>             1281 Thompson Bridge Road, NW           </div> <div style="border-top: 1px solid black; padding-top: 5px;">             Meeting: 5/9/2017<br/>             Prepared: 4/20/2017           </div> |  | <b>Tax Parcel:</b> 01-074-004-020                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |
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Applicant:

**MONTECITO DEVELOPMENT**

## SPECIAL USE REQUEST



**Request:**  
Special Use within the Neighborhood Business (N-B) zoning district (0.80+/- acre tract), for a convenience store with fuel pumps

**Subject Area Address:**  
1281 Thompson Bridge Road, NW

Meeting: 5/9/2017

Prepared: 4/20/2017

**Gainesville Community Development Department**

 Subject Area

Aerial from 2015

0 120 240 360 480 Feet



1" = 200'

**Tax Parcel:** 01-074-004-020



# ANDERSEN | TATE | CARR

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February 24, 2017

## **VIA E-MAIL AND HAND DELIVERY**

City of Gainesville, Georgia  
Attn: Rusty Ligon, Community Development Director  
and Matthew Tate, Planning Manager  
300 Henry Ward Way, Suite 303  
Gainesville, Georgia 30501  
[mtate@gainesville.org](mailto:mtate@gainesville.org)

## **RE: REZONING AND ANNEXATION APPLICATIONS AND LETTER OF INTENT FOR MONTECITO DEVELOPMENTS, LLC**

Dear Mr. Ligon and Mr. Tate:

This Letter of Intent is written on behalf of the property owner and Applicant, Montecito Developments, LLC (the "Applicant"), in support of the submitted zoning applications and any related variances needed or associated with the proposed zoning site plan (collectively, the "Applications") for the subject property located at 1281 Thompson Bridge Rd., NW and 149 Enota Ave., NW, Gainesville, GA 30501, Hall County Tax Parcel Nos. 01074 004020 and 01074 004001 (the "Property"), totaling approximately 1.5 acres.

The Applicant seeks a rezoning from *O&I and N-B to N-B*, to assemble the two long-vacant parcels to allow for a quality convenience store with gas pumps to serve residents and support the City's commercial tax base. This neighborhood, retail use will have no adverse impacts on surrounding properties. Based on market research, there is a need in this area for a quality, neighborhood convenience store. The Applicant is a developer of the well-received Circle K stores, a "2.0" model that provides modern amenities, design and store layouts to support and provide services to their suburban customer base. The Applicant currently plans to comply with all other buffer and setback requirements as reflected in the current zoning conditions. The proposed store will consist of a convenience store building totaling approximately 5,200 square feet, with 4 pump islands. The convenience store will include food, beverage and coffee options for customers.

The property's vacant status and tax value would be greatly increased with the addition of the proposed commercial development. The requested rezoning for the proposed commercial, convenience store and gas pump uses have a demonstrated history of being entirely suitable and complementary to the other land uses in the area, including the more intense commercial and office uses already permitted as a matter of right. This request is consistent with City's previous decisions and precedent in rezoning this and similarly situated properties in this area, with the current uses permitted under the N-B zoning district, and with the future land use plan for this area, being an existing commercial node.

Letter of Intent  
1281 Thompson Bridge Rd.  
and 149 Enota Ave.  
Montecito Developments, LLC

February 24, 2017  
Page 2 of 2

The property has access to a public water supply, public sanitary sewer, and convenient direct access to collector streets, major thoroughfares and state and interstate highways.

### **Constitutional Objections**

The portions of the City of Gainesville Zoning Ordinances which classify or condition the Property into any more or less intensive zoning classification and/or zoning conditions other than as requested by the Applicant and property owner are and would be unconstitutional in that they would take the Applicant's and property owners' property rights without first paying fair, adequate and just compensation for such rights, in violation of Article I, Section I, Paragraph II of the Constitution of the State of Georgia of 1983, the Due Process Clause of the Fourteenth Amendment to the Constitution of the United States.

The Property is presently suitable for development subject only to the approval of the requested rezoning, as requested and amended by the Applicant and property owners, and is not economically suitable for development under its present zoning and development classification, conditions, regulations, and restrictions due to its location, shape, size, surrounding development, and other factors. A denial of the requested applications would constitute an arbitrary and capricious act by the City of Gainesville without any rational basis therefore, constituting an abuse of discretion in violation of Article I, Section I, Paragraphs I and II of the Constitution of the State of Georgia of 1983 and the Due Process Clause of the Fourteenth Amendment to the Constitution of the United States.

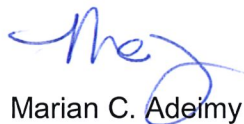
A refusal by the City of Gainesville to approve the Applicant's and property owners' requested rezoning, or to apply additional conditions outside of those proposed or agreed to by the Applicant, so as to prohibit reasonable economic use of the Property, would be unconstitutional and discriminate in an arbitrary, capricious and unreasonable manner as to the Applicant and property owners, in violation of Article I, Section I, Paragraph II of the Constitution of the State of Georgia of 1983 and the Equal Protection Clause of the Fourteenth Amendment to the Constitution.

### **Conclusion**

Applicant respectfully requests approval, and submits the Applications and exhibits in further support of their requests. The Applicant and their representatives welcome the opportunity to meet with City officials and staff to answer any questions.

Respectfully submitted,

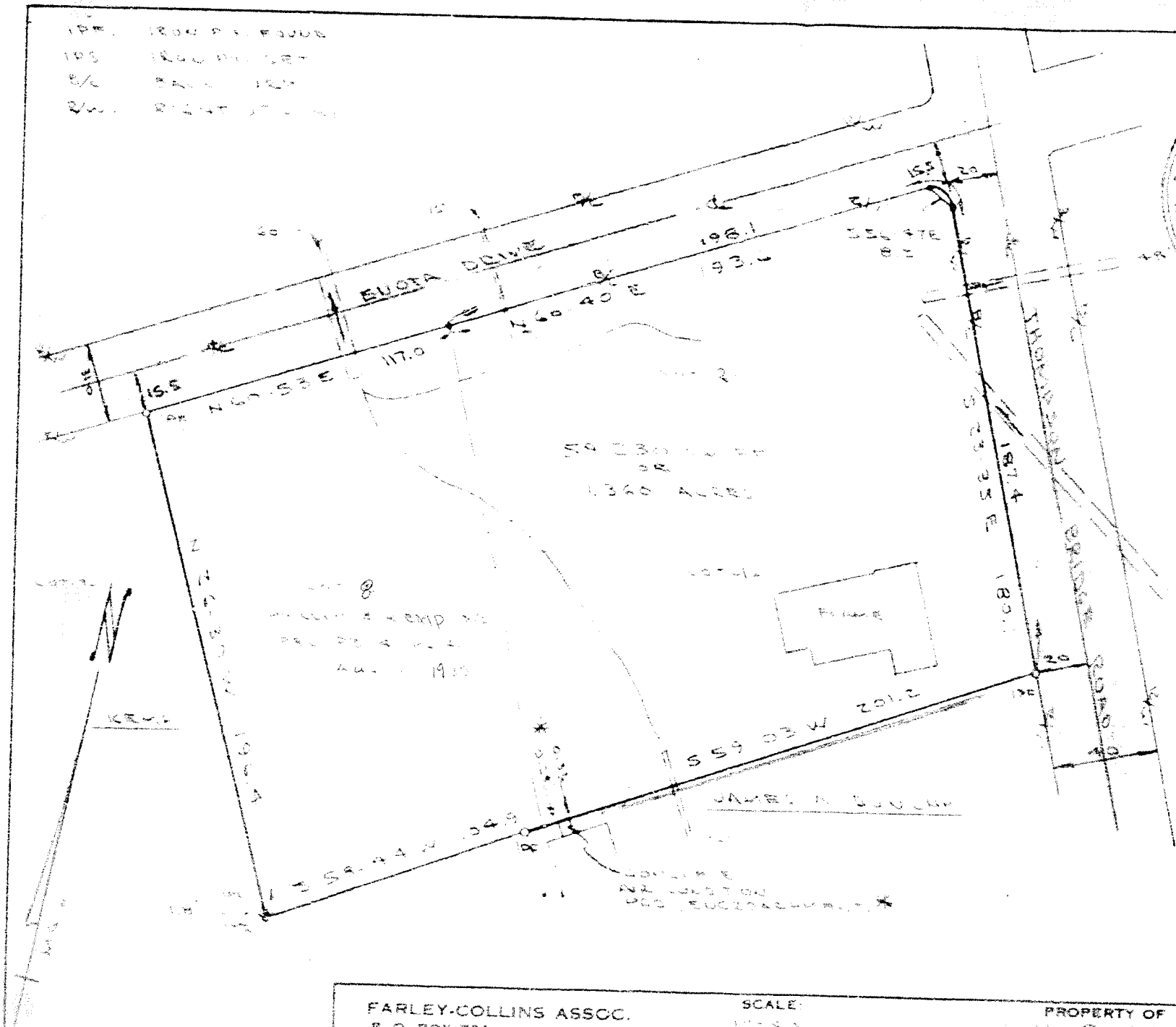
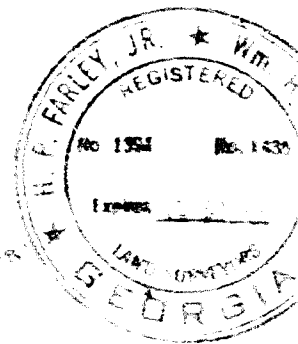
**ANDERSEN, TATE & CARR, P.C.**



Marian C. Adeimy  
Attorneys for Applicant

Enclosures  
(Rezoning Application Packets)

1PM. 1200 P.M. ROAD  
 1PS. 1200 P.M. SET  
 E/C. 1200 P.M. SET  
 RW. 1200 P.M. SET



FARLEY-COLLINS ASSOC.  
 1200 P.M. SET

SCALE: 1" = 100'

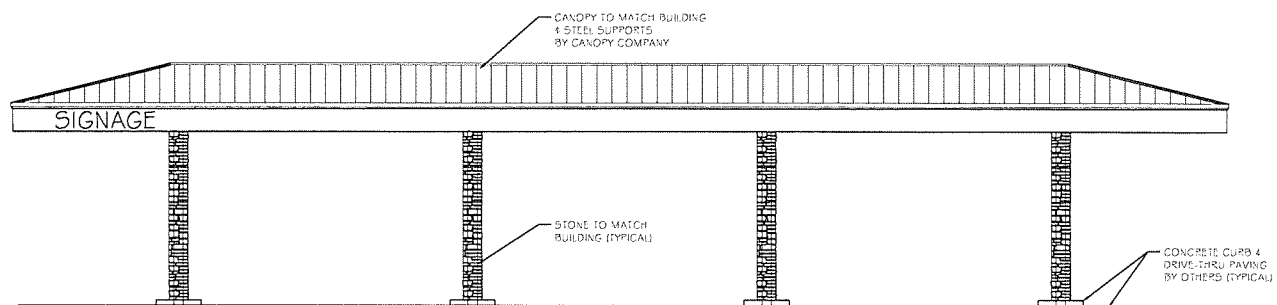
PROPERTY OF



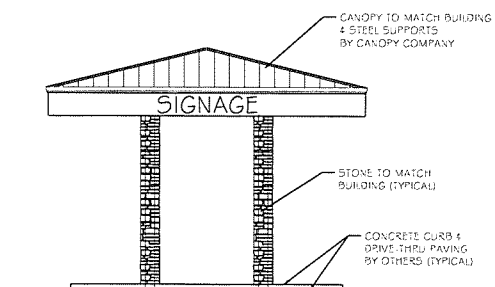








1  
CPO1  
GAS PUMP CANOPY ELEVATIONS  
SCALE: 1/8" = 1'-0"



2  
CPO1  
GAS PUMP CANOPY END ELEVATIONS  
SCALE: 1/8" = 1'-0"

## **Traffic Impact Study**

Proposed Convenience Store with Gasoline Pumps  
Thompson Bridge Road (GA 60) at Enota Avenue  
City of Gainesville, Georgia

February 23, 2017  
Revised April 19, 2017

**MARC R. ACAMPORA, PE, LLC**  
TRAFFIC ENGINEERING



## Traffic Impact Study

Proposed Convenience Store with Gasoline Pumps  
Thompson Bridge Road (GA 60) and Enota Avenue  
City of Gainesville, Georgia

study prepared for:

Montecito Developments, LLC  
2607 Vineville Avenue, Suite 205  
PO Box 13  
Macon, Georgia 31204

February 23, 2017  
Revised April 19, 2017



**MARC R. ACAMPORA, PE, LLC**

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web: [www.acamporatraffic.com](http://www.acamporatraffic.com)

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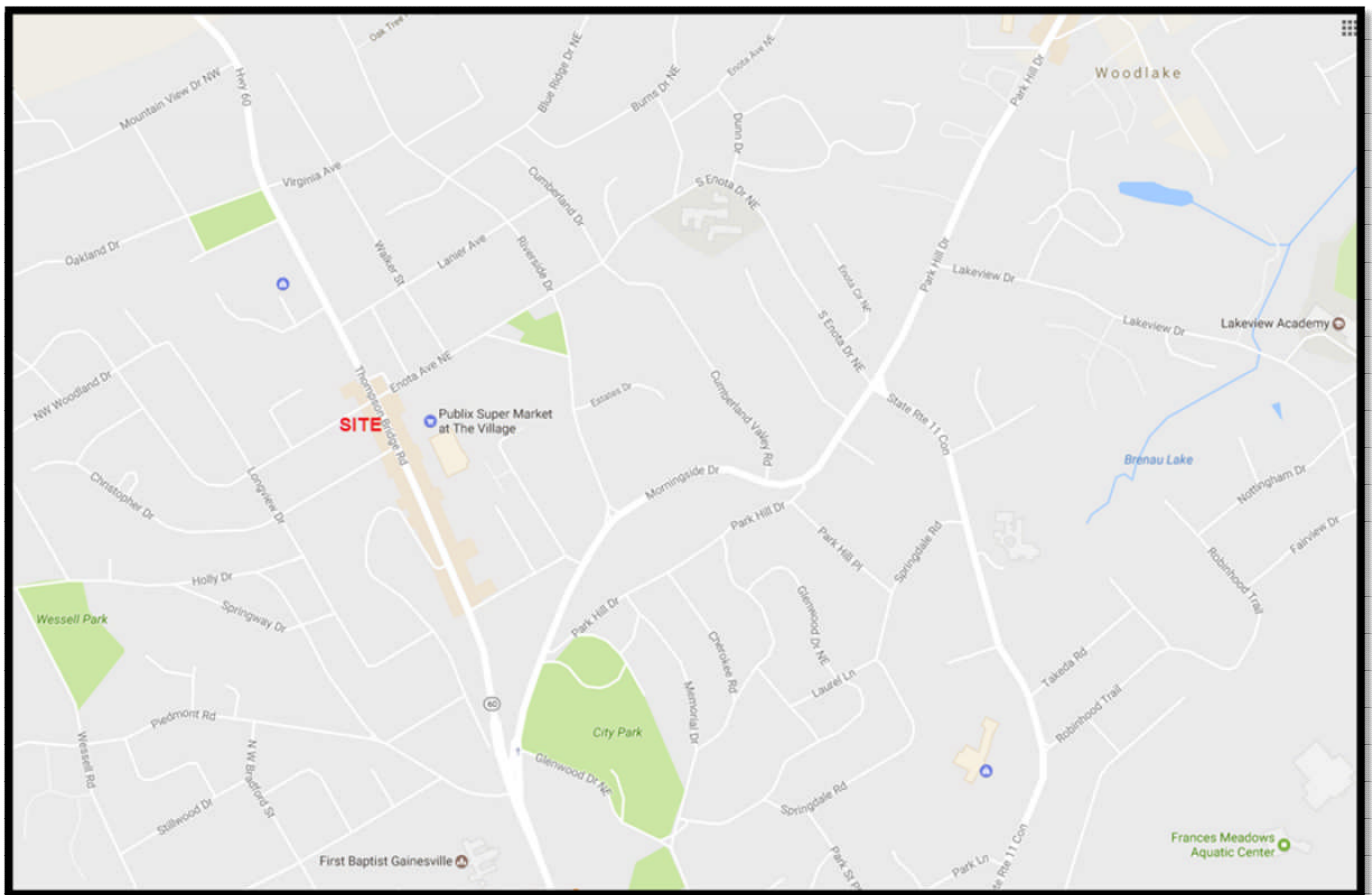
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## Introduction

This study assesses the traffic impact of a proposed convenience store with gasoline pumps in Gainesville, Georgia. The site is located in the southwest corner of the intersection of Thompson Bridge Road (GA 60) and Enota Avenue, as shown in the location map in Figure 1. The project will include a 4,200 square foot convenience store with four gasoline pumps (eight fueling positions). Vehicular access will be provided at one full-movement driveway on the south side of Enota Avenue and one full-movement driveway on the west side of Thompson Bridge Road.

The purpose of this traffic impact study is to determine existing traffic operating conditions in the vicinity of the proposed development, project future traffic volumes, assess the impact of the subject development, then develop conclusions and recommendations to mitigate the project traffic impact and ensure safe and efficient existing and future traffic conditions in the vicinity of the project.



**Figure 1 – Convenience Store Site Location Map**

## Existing Traffic Conditions

Existing traffic operating conditions in the vicinity of the proposed convenience store were assessed. The following is a description of existing transportation facilities, traffic volumes, and intersection operations.

### Study Network

The City of Gainesville's Unified Land Development Code (ULDC) specifies that the study area to be included in a traffic impact study will be determined by calculating the peak hour and daily trips that the project will generate, then applying the table provided in the code, shown as Table 1, below, to determine the distance from the project that must be included in the study area.

**Table 1 – ULDC Study Area Size Requirements**

| Peak Hour Trips Generated | Daily Trips Generated | Distance from Perimeter of Proposed Development Along Roads |
|---------------------------|-----------------------|-------------------------------------------------------------|
| 100 - 150                 | 1,000 – 1,500         | ½ mile                                                      |
| 151 - 500                 | 1,501 – 5,000         | 1 mile                                                      |
| 501 – 1,000               | 5,001 – 10,000        | 2 miles                                                     |
| 1001 or more              | 10,001 or more        | 3 miles                                                     |

from the City of Gainesville ULDC

The trip generation for the proposed development is presented later in this report, summarized in Table 4. The peak hour trip generation for the project was calculated at 153 unadjusted or 52 new trips and the 24-hour volume is 4,340 unadjusted or 1,574 new trips. Based on these numbers, applied to the ULDC standard presented above, the study network was determined to extend for one mile from the limits of the proposed site. The one mile limits were presented to the City and, based on that information, the intersections to be included in this study were agreed upon with the City as follows:

- 1) Thompson Bridge Road at Walmart / Taco Bell Access
- 2) Thompson Bridge Road / Enota Avenue
- 3) Enota Avenue at Riverside Drive
- 4) GA 11 Business at South Enota Avenue
- 5) GA 60 at GA 11 Business
- 6) GA 60 at Ridgewood Avenue

### Description of Existing Roadways

Thompson Bridge Road (Georgia State Route 60) is a principal arterial with a northwest / southeast orientation adjacent to the subject site. The road has two through lanes in each direction, with exclusive left turn lanes in both directions at Enota Avenue. The terrain along the adjacent segment of Thompson Bridge Road is very gently rolling and the posted speed limit is 40 mph in the northbound direction, changing to 45 mph just north



of Enota Avenue. Southbound, the speed limit drops from 45 mph to 40 mph along the frontage of the subject property. There is a traffic signal at the intersection of Thompson Bridge Road and Enota Avenue.

Enota Avenue is a two lane residential street that primarily serves single family subdivisions to the west of Thompson Bridge Road and a mix of single family, multi-family residential, and a school, east of Thompson Bridge Road. The eastbound approach of Enota Avenue has an exclusive left turn lane and a shared through/right at Thompson Bridge Road, while the westbound approach has separate left, through, and right turn lanes. The terrain along Enota Avenue is rolling with a downhill grade on the eastbound approach west of the site access, leveling off at Thompson Bridge Road. The westbound approach has a downhill grade approaching Thompson Bridge Road.

### Pedestrian, Bicycle, and Transit Accessibility

There are no striped designated bicycle lanes on any of the roadways in this traffic study. In the vicinity of the site, sidewalk is located in the northeast corner of the Thompson Bridge / Enota intersection, but not on the other corners. Pedestrian crossing signals and crosswalks are provided on all approaches at the Thompson Bridge / Enota intersection, but only the northeast corner is ADA accessible. There is regularly scheduled mass transit (bus) service (Gainesville Connection, Route 20) along the adjacent section of Thompson Bridge Road and Enota Avenue east of Thompson Bridge Road.

Photographs 1 through 8 are taken at each of the intersections evaluated in this study.



**Photograph 1 – View of Thompson Bridge Road Facing Walmart from Taco Bell Access**



**Photograph 2 – Thompson Bridge Road Facing North From Site Access**



**Photograph 3 – Thompson Bridge Road Facing South From Site Access**





**Photograph 4 – Enota Avenue Facing East Toward Thompson Bridge Road, Site Access to Right**



**Photograph 5 – Riverside Drive Facing North at All-Way Stop at Enota Avenue**



**Photograph 6 – GA 11 Business Facing Southwest Toward South Enota Avenue**



**Photograph 7 – Green Street Facing North at Fork with Thompson Bridge Road to Left, GA 11 Bus to Right**



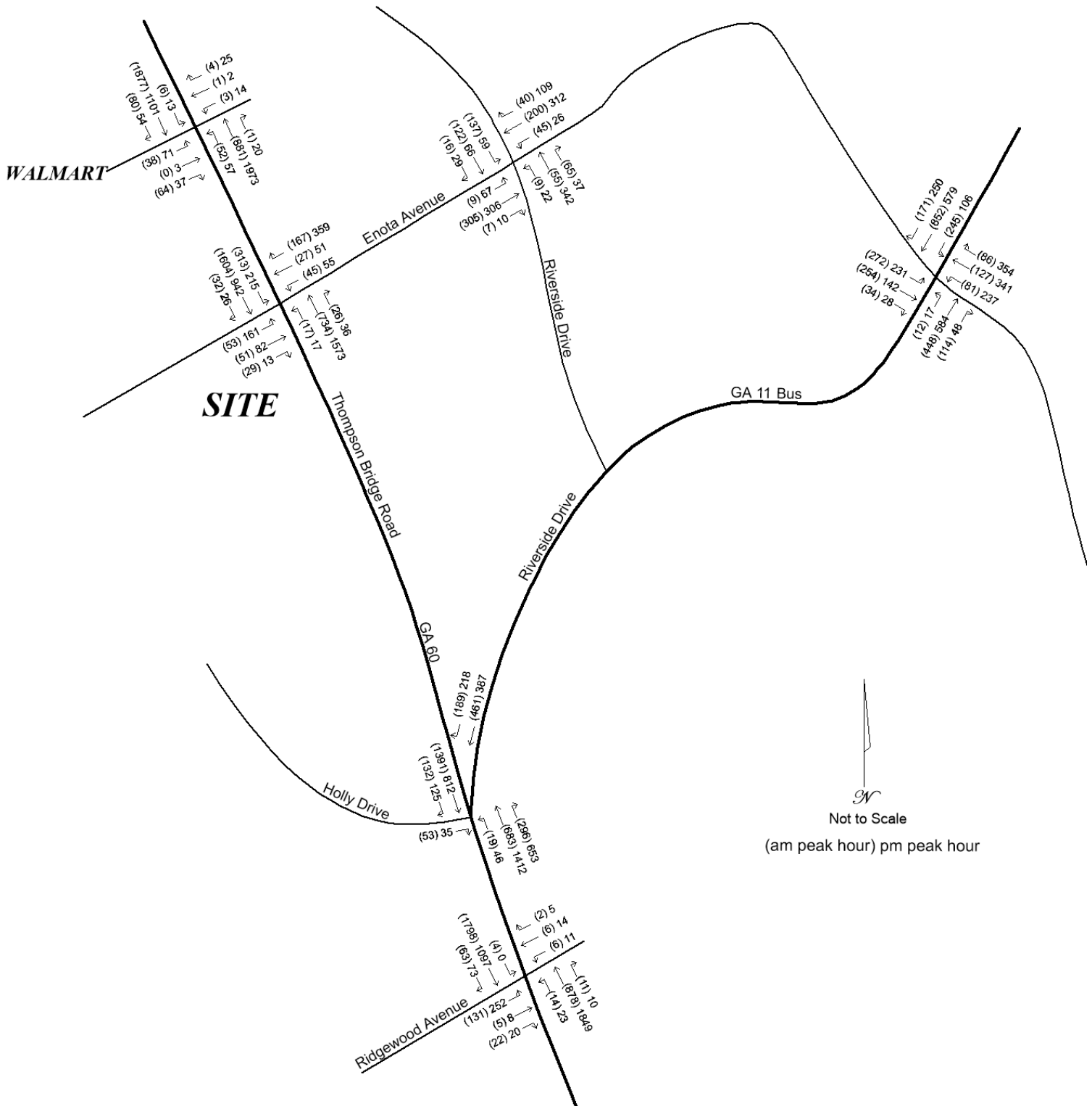


**Photograph 8 – GA 60 Facing North at Ridgewood Avenue**

### Existing Traffic Volumes

Existing full turning movement traffic volume counts were collected at the six intersections previously listed. The counts were collected at the Thompson Bridge / Enota intersection on Thursday, February 16, 2017. The counts at Thompson Bridge / Walmart, Enota / Riverside, and GA 11 Bus / South Enota were collected on Thursday, March 30, 2017, and the counts at GA 60 / GA 11 Bus and GA 60 / Ridgewood were obtained from another recent traffic study performed in the area, collected on Wednesday, February 22, 2017. Observations at the study intersections revealed that the lunchtime/midday peak volumes were visibly lower than the morning and evening peak times. Therefore, this study focused on the busier a.m. and p.m. times, with the logic that these will represent the times of day with the highest delays. The counts were collected at each intersection from 7:00 a.m. to 9:00 a.m. and from 4:00 p.m. to 6:00 p.m. Area schools were in standard session on the days on which the counts were recorded. From the count data, the highest four consecutive 15-minute interval volumes at each intersection, during each time period, were determined. These volumes make up the typical weekday a.m. and p.m. peak hour traffic volumes at that intersection. The existing a.m. and p.m. peak hour turning movement volumes are shown in Figure 2. The raw count data is found in Appendix A.

In addition to the intersection turning movement counts, Georgia Department of Transportation (Georgia DOT) annual average daily traffic (AADT) volume counts were obtained on nearby roadways for the five years from 2011 to 2015 (the latest year for which volumes are available). Table 2 presents the historic Georgia DOT counts and the annual growth rates between the counts.



## Thompson Bridge at Enota Avenue Convenience Store Traffic Impact Study

**MARC R ACAMPORA, PE, LLC**

**Table 2 – Historic Georgia DOT Traffic Volume Counts and Annual Growth Rates**

| Year              | GA 60 S of Enota | Annual Growth | GA 60 N of North Pointe Dr | Annual Growth | Enota W of Thompson Bridge | Annual Growth | Enota E of Thompson Bridge | Annual Growth |
|-------------------|------------------|---------------|----------------------------|---------------|----------------------------|---------------|----------------------------|---------------|
| Station ID        | 1390314          |               | 1390316                    |               | 1390612                    |               | 1390609                    |               |
| 2011              | 21,690           |               | 29,390                     |               | 1,560                      |               | 7,540                      |               |
| 2012              | 24,310           | 12.1%         | 29,010                     | -1.3%         | 1,560                      | 0.0%          | 7,410                      | -1.7%         |
| 2013              | 24,220           | -0.4%         | 30,030                     | 3.5%          | 1,590                      | 1.9%          | 7,360                      | -0.7%         |
| 2014              | 25,700           | 6.1%          | 30,000                     | -0.1%         | 1,700                      | 6.9%          | 7,360                      | 0.0%          |
| 2015              | 26,500           | 3.1%          | 31,000                     | 3.3%          | 1,760                      | 3.5%          | 7,660                      | 4.1%          |
| avg annual growth |                  | 5.1%          |                            | 1.3%          |                            | 3.1%          |                            | 0.4%          |

The AADT volume on Thompson Bridge adjacent to the subject site was 26,500 in 2015 and the AADT on Enota adjacent to the site was 1,760 in 2015.

#### Existing Intersection Operations

Existing traffic operations were analyzed at the counted intersection using Synchro software, version 8, in accordance with the methodology presented in the Transportation Research Board's 2010 *Highway Capacity Manual (HCM 2010)*. The *HCM 2010* methodology is presented in Appendix B. The results of the analysis are shown in Table 3. Computer printouts containing detailed results of the analysis are located in Appendix C. Levels of service and delays are provided for the overall intersection and for each approach or controlled movement.

**Table 3 – Existing Intersection Operations**

| Intersection / Approach                            | A.M. Peak Hour |               | P.M. Peak Hour |               |
|----------------------------------------------------|----------------|---------------|----------------|---------------|
|                                                    | LOS            | Delay (s/veh) | LOS            | Delay (s/veh) |
| 1. Thompson Bridge Road at Walmart/Taco Bell       | A              | 8.8           | B              | 11.0          |
| northbound approach Thompson Bridge                | A              | 2.8           | A              | 9.3           |
| southbound approach Thompson Bridge                | A              | 8.9           | A              | 5.7           |
| eastbound approach Walmart access                  | D              | 52.2          | E              | 69.1          |
| westbound approach Taco Bell access                | D              | 51.3          | D              | 36.5          |
| 2. Thompson Bridge Road at Enota Avenue            | B              | 11.8          | D              | 36.8          |
| northbound approach Thompson Bridge                | A              | 8.8           | D              | 36.2          |
| southbound approach Thompson Bridge                | A              | 6.4           | C              | 24.1          |
| eastbound approach Enota                           | E              | 61.1          | E              | 56.9          |
| westbound approach Enota                           | D              | 38.7          | E              | 58.7          |
| 3. Enota Avenue at Riverside Drive                 | C              | 22.1          | <b>F</b>       | <b>58.5</b>   |
| northbound approach Riverside                      | C              | 15.5          | <b>F</b>       | <b>59.3</b>   |
| southbound approach Riverside                      | C              | 22.3          | C              | 20.7          |
| eastbound approach Enota                           | C              | 22.7          | <b>F</b>       | <b>59.9</b>   |
| westbound approach Enota                           | C              | 25.0          | <b>F</b>       | <b>71.3</b>   |
| 4. GA 11 Business at South Enota Avenue            | D              | 47.4          | D              | 48.6          |
| northbound approach GA 11 Bus                      | <b>F</b>       | <b>80.1</b>   | E              | 79.2          |
| southbound approach GA 11 Bus                      | E              | 64.9          | D              | 44.7          |
| eastbound approach South Enota                     | C              | 30.2          | D              | 41.2          |
| westbound approach South Enota                     | C              | 34.4          | D              | 42.9          |
| 5. GA 60 (Green/Thompson Bridge) at GA 11 Business | C              | 23.1          | B              | 17.7          |
| northbound approach Green                          | A              | 5.6           | A              | 6.1           |
| southbound approach Thompson Bridge                | B              | 16.2          | B              | 10.8          |
| eastbound approach Holly                           | B              | 19.2          | A              | 0.5           |
| westbound approach GA 11 Bus                       | E              | 68.2          | E              | 68.1          |
| 6. GA 60 (Green) at Ridgewood Avenue               | B              | 19.6          | C              | 26.4          |
| northbound approach Green                          | A              | 6.0           | C              | 24.9          |
| southbound approach Green                          | B              | 18.5          | B              | 12.7          |
| eastbound approach Ridgewood                       | <b>F</b>       | <b>92.5</b>   | <b>F</b>       | <b>93.6</b>   |
| westbound approach driveway                        | D              | 49.6          | D              | 40.7          |



The following is a discussion of the results at each intersection:

1. **Thompson Bridge Road at Walmart / Taco Bell** – This signalized intersection is the main access for Walmart and Taco Bell. The intersection operates well in the existing a.m. and p.m. Some delays are incurred on the side street approaches primarily due to the signal timing, appropriately, heavily favoring the northbound and southbound approaches on Thompson Bridge Road. The side street left turn lanes are extremely short, especially on the Taco Bell approach, which only provides storage for one automobile. This is generally not problematic due to the relatively low side street approach volumes. The pedestrian signal head in the southeast corner (closest to Taco Bell), for pedestrians crossing the Taco Bell access, is very difficult to see in daylight and it is recommended that this pedestrian signal head be adjusted to improve its visibility. It is also noted that the southbound approach of Thompson Bridge Road does not include an exclusive right turn lane to serve the Walmart access. This is presumably due to topographic constraints in the Walmart property. Based on the southbound right turn volume and the given conditions, a southbound right turn lane would be justified at this location according to Georgia DOT standards.
  
2. **Thompson Bridge Road at Enota Avenue** – The analysis of the Thompson Bridge / Enota intersection shows an overall acceptable level of service. The side street approaches on Enota Avenue operate at LOS E, again, primarily due to the greentime on the signal favoring the Thompson Bridge Road approaches. Two changes to the signal operations at this intersection would be beneficial. First, the 160 second cycle length is lengthy and the Synchro analysis suggests that cycle lengths of 80 to 100 seconds are more optimal. Shorter cycle lengths would also reduce side street queuing. It is recognized that the cycle length is dependent on other signals in the corridor and spot changes at individual intersections may not be appropriate. Also, three of the four approaches (all but westbound Enota Avenue) have protected / permissive left turn phasing. There would be a modest operational benefit, and a potential safety improvement, to adding this phasing to the westbound approach. It was also noted in the field that some adjacent intersections have been converted to the flashing permissive left turn arrow, but this intersection has not.
  
3. **Enota Avenue at Riverside Drive** – This all-way stop intersection operates well in the a.m., but at LOS F in the p.m. The volumes at this intersection are such that exclusive turn lanes are appropriate for several movements. However, to avoid confusion about right-of-way, it is generally not advisable to add multiple approach lanes at an all-way stop sign-controlled intersection. This intersection may be a candidate for signalization. It is recommended that a signal warrant analysis be performed for this intersection according to the standards proscribed in the Federal Highway Administration's *Manual On Uniform Traffic Control Devices* (MUTCD). Should signalization be justified, consideration could be given to providing turn lanes, as appropriate. With a simple two-phase signal and no additional turn lanes, this intersection would operate at LOS B in the a.m. peak hour and LOS A in the p.m. peak hour. It is noted that Enota Avenue has received traffic calming treatment including highly-visible pedestrian crossings with speed humps. The all-way stop at the Enota / Riverside intersection provides a traffic calming function which may be diminished if this intersection was signalized. A roundabout is an alternative method of control that merits consideration at this intersection. The analysis of a

roundabout at this intersection reveals excellent operations, with LOS A in the a.m. and LOS B in the p.m.

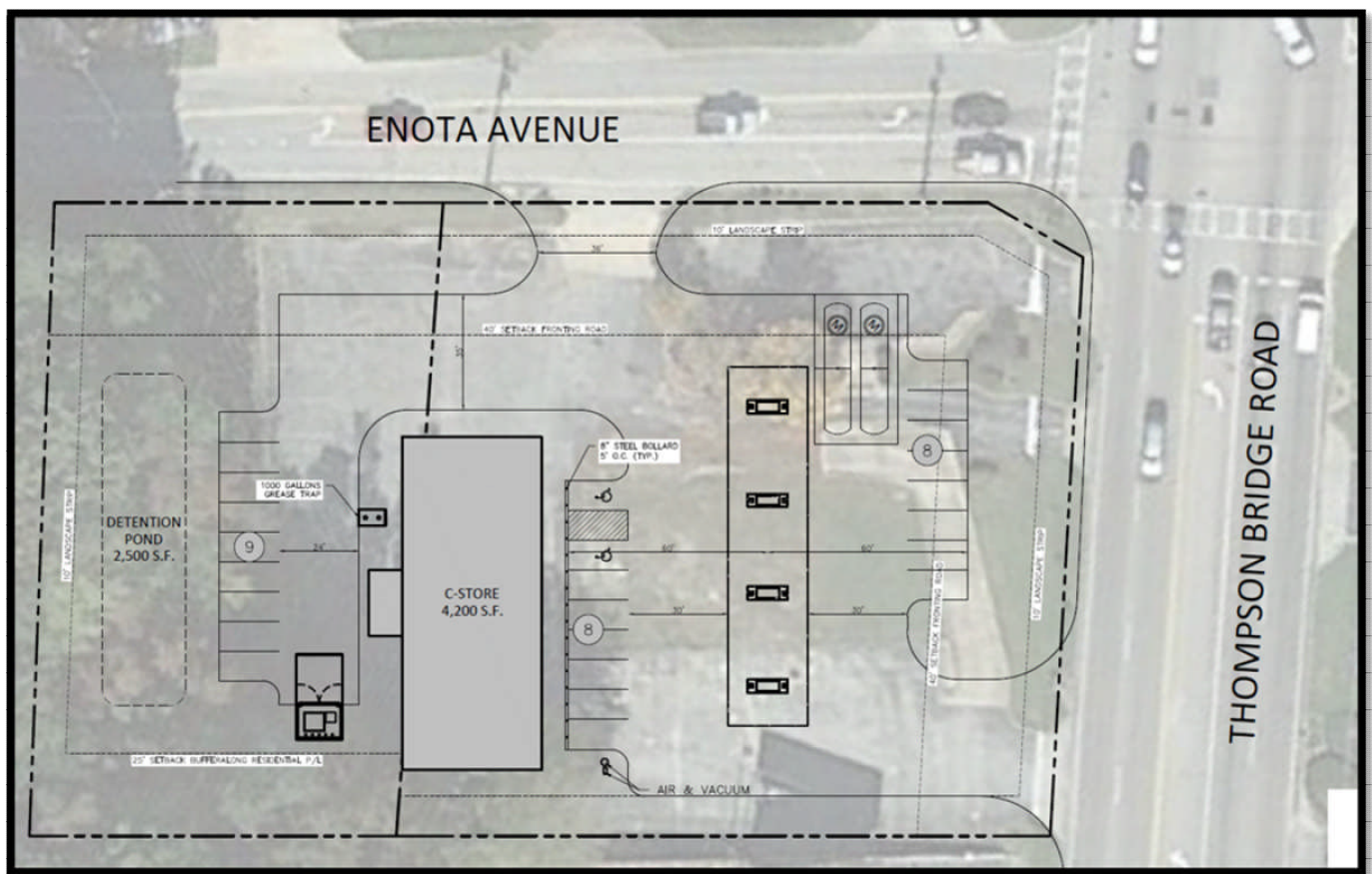
4. **GA 11 Bus at South Enota Avenue** – There are no exclusive right turn lanes on either GA 11 Bus approach at this intersection. The northbound right turn volumes (114 a.m., 48 p.m.) and, even more significantly, the southbound right turn volumes (171 a.m., 250 p.m.) on GA 11 Bus justify the addition of these exclusive right turn lanes. The addition of these lanes will reduce overall intersection delays by about 10 seconds per vehicle in each time period and will eliminate the a.m. northbound LOS F. The signal includes protected/permissive phasing on all but the northbound approach, which has permissive-only phasing. This is acceptable given the low northbound left turn volumes on GA 11 Bus.
5. **GA 60 (Thompson Bridge Road / Green Street) at GA 11 Business** – This large intersection is the fork at which GA 11 Business (Riverside Drive) splits from GA 60 (Thompson Bridge Road). This intersection generally operates acceptably with the existing lanes and control. The southbound right turn volume into Holly Drive operates beyond the signal control. The volume of these right turners are high enough to justify a southbound exclusive right turn lane on GA 60, according to Georgia DOT standards. No other mitigation is recommended at this intersection.
6. **GA 60 (Green Street) at Ridgewood Avenue** – This overall intersection operates acceptably, especially given the tight urban design and lack of exclusive turn lanes. Northbound left turns from GA 60 receive a protected/permissive phasing on the signal and, with the modest northbound left turn volume, this generally provides acceptable operations. However, should a left turner not reach the intersection and complete their left turn movement during the protected portion of the phase, that left turner can significantly impede the through traffic in that lane. Likewise, eastbound Ridgewood Avenue only includes a single lane and, at times, notable queuing was observed on this approach. Ideally, from a traffic operations perspective, this intersection would be widened to include a northbound exclusive left turn lane on GA 60, a second eastbound lane on Ridgewood, and a southbound right turn lane on GA 60. These changes would reduce overall delays and eliminate the LOS F on the Ridgewood approach. However, it is acknowledged that this widening would alter the historic character of this intersection. Therefore, these improvements are suggested for consideration in the context of the overall character and goals of the community.

## Project Traffic Characteristics

This section describes the anticipated traffic characteristics of the proposed convenience store, including a site description, how much traffic the project will generate, and where that traffic will travel.

### Project Description

The proposed development will consist of a 4,200 square foot convenience store with four gasoline pumps (eight fueling positions). Access to the property will be provided by a full movement driveway on Enota Avenue and a full movement driveway on Thompson Bridge Road. The site plan is presented in Figure 3.



**Figure 3 – Site Plan**

It is noted that the current site has three accesses on Thompson Bridge Road – an enter-only lane right at the corner, an exit-only lane a few feet to the south, then a full-movement access at the south property line. The proposed convenience store site plan calls for closing the two accesses near the Enota intersection and preserving just the one full-movement access at the south end of the property. The property also has a single, existing full movement access on Enota Avenue, which will be preserved.

## Trip Generation

Trip generation is an estimate of the number of entering and exiting vehicular trips that will be generated by the proposed development. The volume of traffic that will be generated by the proposed convenience store was calculated using the rates and equations in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 9<sup>th</sup> Edition. ITE Land Use 853 – Convenience Market with Gasoline Pumps was applied. The trip generation was calculated both by using square footage as the independent variable and also using number of fueling positions as the independent variable. The square footage yielded the higher peak hour trip volumes while the fueling positions yielded the higher 24-hour volumes. The average number of fueling positions in the ITE data was 7 for the a.m. peak hour and 8 for the p.m. peak hour data (this site plan calls for 8). The average square footage in the ITE data was 3,000. Since no equations were available and the average rates were, therefore, employed, it was decided to use the number of fueling positions as the independent variable, since the average size of that variable more-closely mirrored that of the proposed development.

The trip generation was adjusted to account for pass-by trips. Pass-by trips are trips to the proposed convenience store that are currently driving on Thompson Bridge Road and Enota Avenue and which will turn into the site for retail / gasoline purchases, then continue on the trip they are already making. The ITE *Trip Generation Manual* provides data for calculating pass-by percentages. This data showed an average pass-by percentage in the a.m. peak hour of 63% and average in the p.m. peak hour of 66%. These high percentages are logical given the nature of the development. The a.m. percentage of 63% was also applied to the 24-hour volumes. Table 4 summarizes the trip generation calculations for the proposed development. The calculations include the raw trips for the convenience store and the pass-by percentages.

**Table 4 – Project Trip Generation**

| Land Use                               | ITE Code | Size                | A.M. Peak Hour |            |            | P.M. Peak Hour |            |             | 24-Hour       |
|----------------------------------------|----------|---------------------|----------------|------------|------------|----------------|------------|-------------|---------------|
|                                        |          |                     | In             | Out        | Total      | In             | Out        | Total       | 2-Way         |
| Convenience Market with Gasoline Pumps | 853      | 8 fueling positions | 67             | 66         | 133        | 76             | 77         | 153         | 4,340         |
| -pass-by                               |          | 63%/66%/63%         | <u>-42</u>     | <u>-42</u> | <u>-84</u> | <u>-50</u>     | <u>-51</u> | <u>-101</u> | <u>-2,766</u> |
| Total New Trips                        |          |                     | 25             | 24         | 49         | 26             | 26         | 52          | 1,574         |

## Trip Distribution and Assignment

The trip distribution percentages indicate what proportion of the project's trips will travel to and from various directions. The new trip distribution percentages were developed based on the locations and proximity of likely trip origins and destinations, primarily residential development in the area, and the routes of travel to and from those areas. The pass-by trips were assigned based on the prevailing flows passing the site. The project trips, shown in Table 4, were assigned to the roadway network based on the trip distribution percentages. The project trip distribution percentages and the a.m. and p.m. peak hour trips expected to be generated by the project are shown in Figure 4.

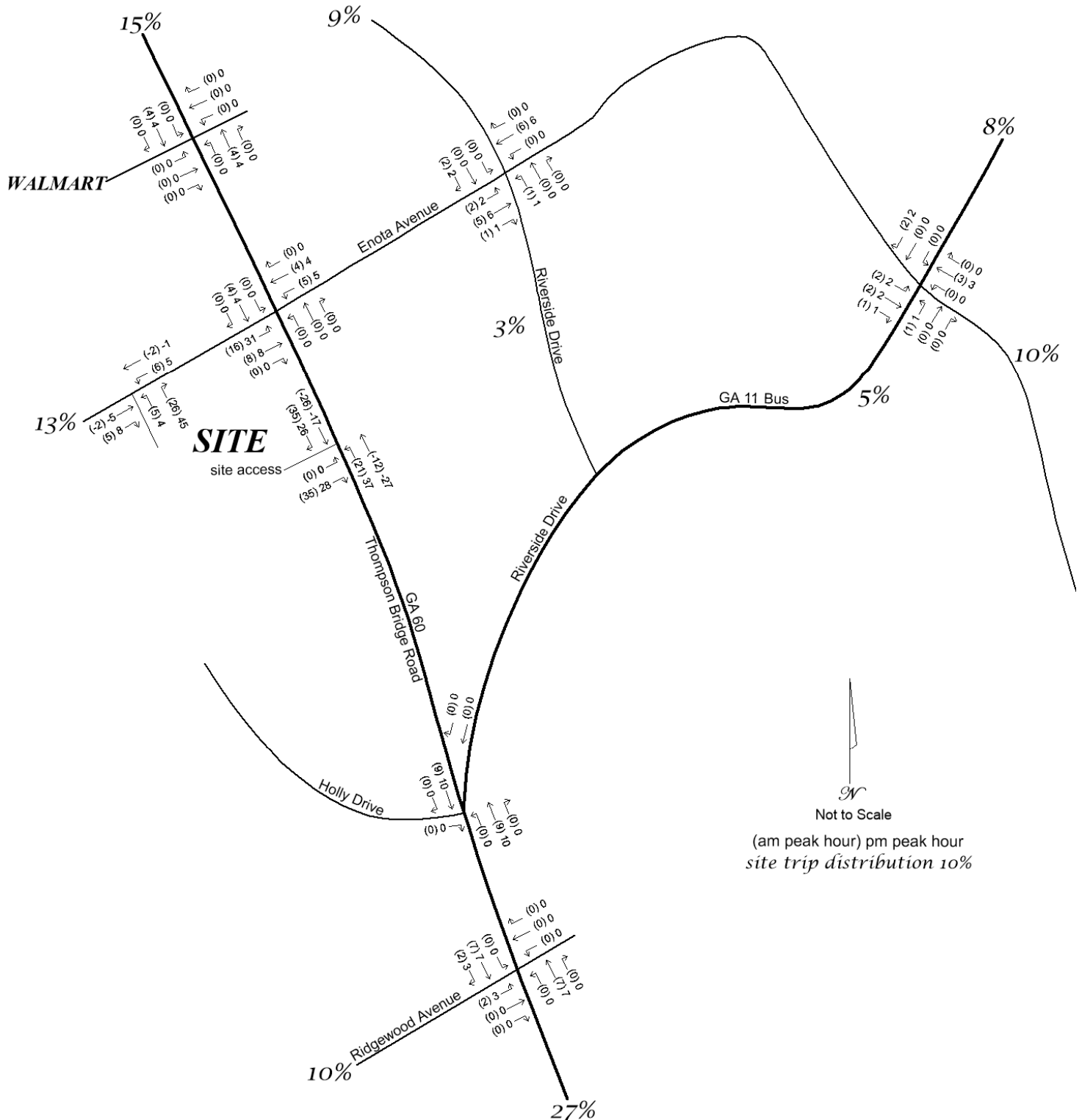


Figure 4 – Project Trip Distribution Percentages and Weekday A.M. and P.M. Peak Hour Site Trips

## Future Traffic Conditions

The historic growth trends identified previously in Table 2, were used to develop an annual growth rate in traffic volumes of 3%, or a total of 6.1% for the projected two year project build-out horizon. This growth rate was applied to the counted volumes at the counted study intersections and at the site access locations. Then, the site traffic volumes were added to these volumes. The site volumes, shown in Figure 4, were added to the 2019 background volumes. This produces the future volumes that will be at each study intersection after the convenience store is built and operational. These future volumes are shown in Figure 5.

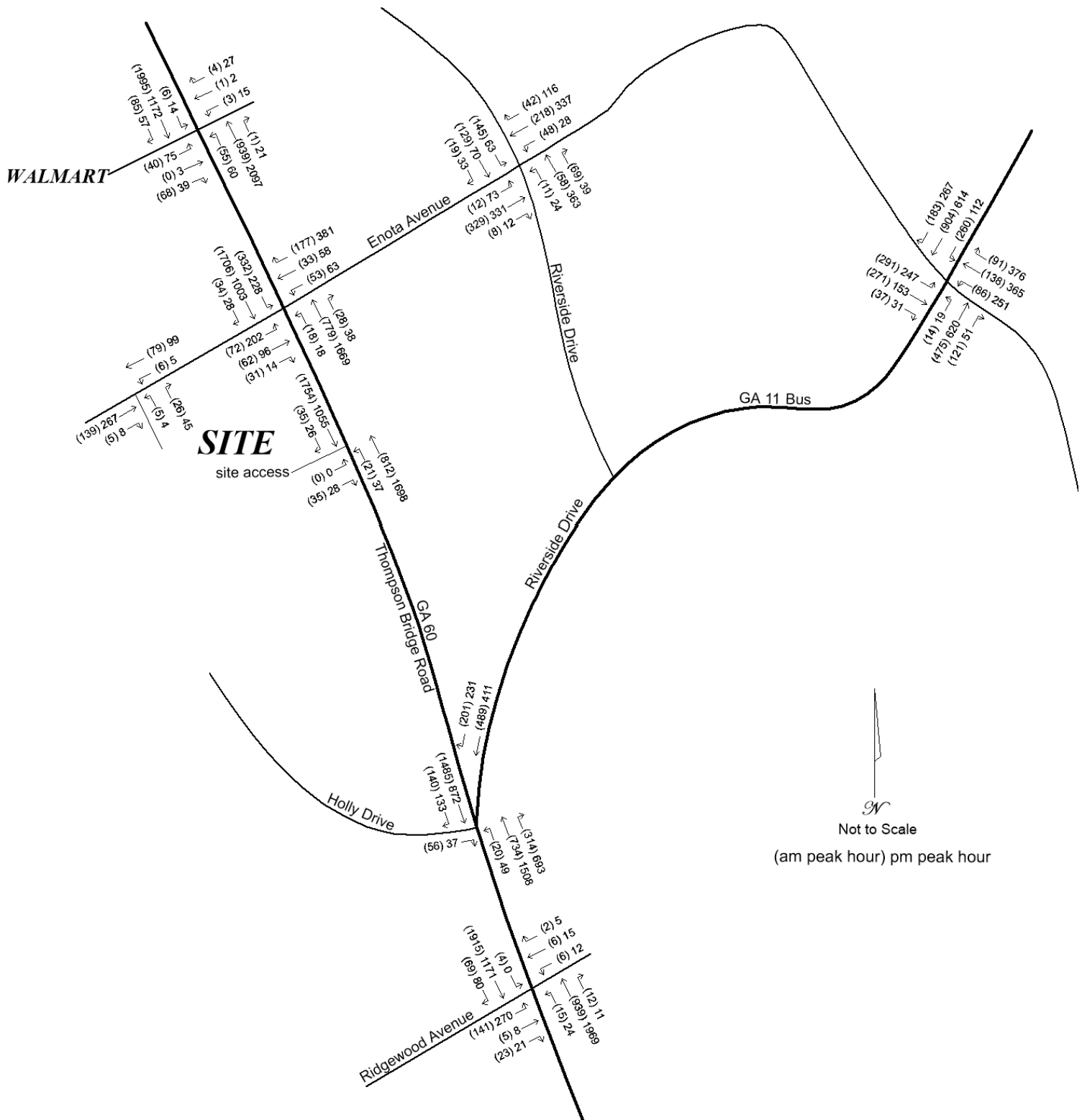


Figure 5 – Future Weekday A.M and P.M. Peak Hour Traffic Volume Projections



## Future Intersection Operations

An operational analysis was performed for the anticipated 2019 future project build-out year, at the study intersections and the proposed site accesses. Table 5 presents the results of this analysis. Computer printouts containing detailed results of the analysis are located in Appendix D.

**Table 5 – Future Intersection Operations**

| Intersection / Approach                            | A.M. Peak Hour |               | P.M. Peak Hour |               |
|----------------------------------------------------|----------------|---------------|----------------|---------------|
|                                                    | LOS            | Delay (s/veh) | LOS            | Delay (s/veh) |
| 1. Thompson Bridge Road at Walmart/Taco Bell       | B              | 10.6          | B              | 11.8          |
| northbound approach Thompson Bridge                | A              | 4.0           | B              | 10.2          |
| southbound approach Thompson Bridge                | B              | 11.1          | A              | 5.9           |
| eastbound approach Walmart access                  | D              | 52.9          | E              | 71.2          |
| westbound approach Taco Bell access                | D              | 51.0          | D              | 36.4          |
| 2. Thompson Bridge Road at Enota Avenue            | B              | 13.5          | D              | 40.6          |
| northbound approach Thompson Bridge                | A              | 9.1           | D              | 37.9          |
| southbound approach Thompson Bridge                | A              | 8.3           | C              | 26.9          |
| eastbound approach Enota                           | E              | 61.3          | E              | 59.4          |
| westbound approach Enota                           | D              | 39.6          | E              | 71.0          |
| 3. Enota Avenue at Riverside Drive                 | D              | 32.1          | <b>F</b>       | <b>66.5</b>   |
| northbound approach Riverside                      | C              | 19.0          | <b>F</b>       | <b>72.7</b>   |
| southbound approach Riverside                      | D              | 30.9          | C              | 23.2          |
| eastbound approach Enota                           | D              | 33.7          | <b>F</b>       | <b>73.0</b>   |
| westbound approach Enota                           | E              | 39.0          | <b>F</b>       | <b>72.3</b>   |
| 4. GA 11 Business at South Enota Avenue            | E              | 56.4          | E              | 56.6          |
| northbound approach GA 11 Bus                      | <b>F</b>       | <b>94.5</b>   | <b>F</b>       | <b>83.7</b>   |
| southbound approach GA 11 Bus                      | <b>F</b>       | <b>80.4</b>   | D              | 46.8          |
| eastbound approach South Enota                     | C              | 25.8          | D              | 49.2          |
| westbound approach South Enota                     | D              | 43.9          | E              | 58.5          |
| 5. GA 60 (Green/Thompson Bridge) at GA 11 Business | C              | 28.0          | C              | 23.3          |
| northbound approach Green                          | A              | 6.2           | A              | 7.8           |
| southbound approach Thompson Bridge                | C              | 26.3          | C              | 29.3          |
| eastbound approach Holly                           | C              | 23.9          | A              | 0.5           |
| westbound approach GA 11 Bus                       | E              | 67.8          | E              | 66.9          |
| 6. GA 60 (Green) at Ridgewood Avenue               | B              | 17.3          | C              | 32.3          |
| northbound approach Green                          | A              | 6.3           | C              | 32.4          |
| southbound approach Green                          | B              | 14.1          | B              | 14.6          |



|                                        |          |              |          |              |
|----------------------------------------|----------|--------------|----------|--------------|
| eastbound approach Ridgewood           | <b>F</b> | <b>100.1</b> | <b>F</b> | <b>105.1</b> |
| westbound approach driveway            | D        | 50.4         | D        | 43.0         |
| 7. Thompson Bridge Road at Site Access | A        | 0.5          | A        | 0.3          |
| northbound left turn entering site     | C        | 18.2         | B        | 11.4         |
| eastbound approach exiting site        | C        | 22.5         | B        | 13.5         |
| 8. Enota Avenue Site Access            | A        | 1.4          | A        | 1.4          |
| westbound left turn entering site      | A        | 7.5          | A        | 7.9          |
| northbound approach exiting site       | A        | 9.3          | B        | 10.6         |

The following is a discussion of these results at each intersection:

- 1. Thompson Bridge Road at Walmart / Taco Bell** – This intersection will continue to operate well in the future a.m. and p.m. Some increases in delays will be experienced on the side street approaches, again primarily due to the signal timing, appropriately, heavily favoring the northbound and southbound approaches on Thompson Bridge Road. No other changes, beyond those identified in the existing analysis, are recommended for this intersection.
- 2. Thompson Bridge Road at Enota Avenue** – The Thompson Bridge / Enota intersection will continue to operate acceptably with the addition of the traffic from the proposed convenience store. The addition of an eastbound exclusive right turn lane along the subject site frontage would prevent right turners from becoming trapped behind eastbound through vehicles. The side street approaches would experience a slight improvement in levels of service with this right turn lane, but reductions in delays on the Thompson Bridge approaches and for the overall intersection would be minimal.
- 3. Enota Avenue at Riverside Drive** – The delays will increase at this intersection in the future, though it is noted that the proposed convenience store will add only a modest volume of new trips to this intersection (17 in the a.m. peak hour, total in all directions, and 18 in the p.m. peak hour). Consistent with the existing recommendations, this intersection would benefit from signalization or a roundabout.
- 4. GA 11 Bus at South Enota Avenue** – The delays at this intersection will also increase in the future, and, as with the Enota / Riverside intersection, the proposed development will add only a small volume of new trips here. The discussion of the exclusive right turn lanes in the existing analysis is still applicable for the future condition. No additional changes are recommended.
- 5. GA 60 (Thompson Bridge Road / Green Street) at GA 11 Business** – This intersection will generally continue to operate acceptably in the future. No other mitigation is recommended at this intersection for the future.
- 6. GA 60 (Green Street) at Ridgewood Avenue** – This intersection will operate in the future comparably to existing conditions. The delays on the eastbound Ridgewood approach will increase and be

unacceptable. The existing analysis discussion about widenings at this intersection are still applicable for the future condition, with no additional changes identified.

**7. Thompson Bridge Road at Site Access** – The assignment of site trips assumed that no left turners would exit the site driveway onto Thompson Bridge Road. Without a specific exiting left turn prohibition, a few vehicles may attempt this movement. However, with the high volumes and number of lanes to cross on Thompson Bridge, it is considered highly probable that most vehicles that wish to travel either northbound on Thompson Bridge or to the east on Enota will exit the site at the Enota driveway and capitalize on the protection of the adjacent signal. Because of the difficulty in making this left turn from the site driveway, and the low numbers of vehicles expected to do so, consideration should be given to prohibiting exiting left turns from this driveway. The Georgia DOT access standards were reviewed for this intersection (Thompson Bridge is Georgia State Route 60) and these are presented below.

**8. Enota Avenue at Site Access** – The site access on Enota is projected to operate with low volumes and very low delays. Most of the site entering trips will enter at the Thompson Bridge access, so that the entering left turns at the Enota driveway are projected at only 6 vehicles in the a.m. peak hour and 5 in the p.m. peak hour. This should minimally impede westbound through flow on Enota. The eastbound right turns entering the site are also minimal, at 5 for the a.m. peak hour and 8 for the p.m. peak hour. This also should minimally impede flows on Enota.

#### Site Access Design and Georgia DOT Access Standards

Thompson Bridge Road is Georgia State Route 60, and, therefore, Georgia DOT access standards apply to the Thompson Bridge access. The site is currently served by three access points on Thompson Bridge Road. The two northernmost driveways will be eliminated by the proposed plan, leaving only one access on Thompson Bridge, at the southern end of the property (furthest from Enota Avenue). The standards proscribed in the Georgia DOT's *Regulations for Driveway and Encroachment Control* (Driveway Manual), revision 4.0, dated 3/15/2016, were reviewed for applicable design standards for the site access on GA 60, and are discussed as follows.

There is an existing two way left turn lane on GA 60, which becomes a northbound exclusive left turn lane along the site frontage, serving Enota Avenue. This left turn lane will also serve as the left turn lane for the proposed convenience store. The northbound left turn movement from Thompson Bridge to Enota, at the nearby signal, has a very modest volume (17 existing in each a.m. and p.m. peak hour) and has protected / permissive phasing. This phasing will also provide some protection and gaps for the left turners into the site access. One potential issue is left turners into the site stopping in the left turn lane at the site access, blocking left turners who wish to turn at Enota, but who queue behind the site left turners. This problem is exacerbated by the proximity of the site access to Enota Avenue. Conversely, the potential for this conflict is somewhat mitigated by the modest volumes actually turning left at Enota Avenue.

It is also noted that there is an access to a retail shopping center (Publix) on the east side of GA 60 which is slightly offset to the south from the proposed site access. At this point on the road, the striping indicates a

northbound left turn lane to Enota, and southbound left turners should not be using that lane to turn left into the Publix center. However, there is always the potential for conflict for opposing left turners at the two driveways (Publix and the subject site). Should left turn conflicts present a problem, it may be beneficial to limit the Publix access to right-in / right-out (RIRO) operations. Since the existing northbound left turn lane on GA 60 will serve the site access, no auxiliary lane analysis was performed for the need for this left turn lane.

The Georgia DOT standards for right turn lanes were reviewed for the site access on GA 60. Table 6, below, is Table 4-6 from the Driveway Manual, and proscribes the right turn volume thresholds at which exclusive right turn lanes must be provided.

**Table 6 – Georgia DOT Minimum Volume Requirements for Right Turn Lanes**

| Posted Speed   | 2 Lane Routes |               | More than 2 Lanes on Main Road |               |
|----------------|---------------|---------------|--------------------------------|---------------|
|                | AADT          |               | AADT                           |               |
|                | < 6000        | >=6000        | <10000                         | >=10000       |
| 35 MPH or Less | 200 RTV a day | 100 RTV a day | 200 RTV a day                  | 100 RTV a day |
| 40 to 50 MPH   | 150 RTV a day | 75 RTV a day  | 150 RTV a day                  | 75 RTV a day  |
| 55 to 60 MPH   | 100 RTV a day | 50 RTV a day  | 100 RTV a day                  | 50 RTV a day  |
| >= 65 MPH      | Always        | Always        | Always                         | Always        |

**Table 4-6 Minimum Volumes Requiring Right Turn Lanes**

As reported earlier, the 2015 AADT on Thompson Bridge Road is 26,500 vpd. The southbound right turn volume (RTV) per day at the GA 60 access is calculated as 35% of the site entering new trips ( $35\% \times 787 = 275$ ) plus an estimated 50% of the site entering pass-by trips ( $50\% \times 1,383 = 692$ ) for an entering right turn volume of 967 RTV per day. This substantially exceeds the Georgia DOT threshold of 75 RTV per day. Therefore, an exclusive right turn lane is required at the site access on Thompson Bridge Road according to Georgia DOT standards.

Table 7, below, is Table 4-8 from the Driveway Manual and proscribes the right turn lane design standards. As noted previously, the posted speed limit changes along the subject property frontage, dropping from 45 mph to 40 mph, so the right turn lane would be partially in each speed zone. At 40 mph, the standard for right turn lanes is 150 feet of full-width storage and a 50 foot taper. At 45 mph, the standard is 175 feet of full-width storage and a 100 foot taper. Most of the lane would be in the 45 mph zone and this would provide the more conservative design. However, it is also noted that the distance from the south curb on Enota to the north curb of the site access scales to approximately 150 feet. Therefore, insufficient distance is available to provide the required storage plus taper at either speed standard. The Georgia DOT spacing standards are proscribed in Driveway Manual Table 3-1 – Spacing Criteria for Driveways, Public Road, and Side Streets. At 45 mph, the minimum spacing is 230 feet, which is also not satisfied by the proposed design, either between the site access and Enota Avenue or between the site access and the existing driveway to the property to the south. It is recommended that these design factors be discussed with Georgia DOT and the City to determine an acceptable solution. Consideration should be given to the fact that the proposed plan does eliminate two of the three existing accesses along the subject frontage, thus reducing conflict points and providing an improved design over the existing condition.

**Table 7 – Georgia DOT Design Standards for Right Turn Lanes**

| Speed, mph | Full Width Storage, ft. | Taper, ft. |
|------------|-------------------------|------------|
| 25         |                         | 50         |
| 30         | 75                      | 50         |
| 35         | 100                     | 50         |
| 40         | 150                     | 50         |
| 45         | 175                     | 100        |
| 50         | 225                     | 100        |
| 55         | 250                     | 100        |
| 60         | 300                     | 100        |
| 65         | 350                     | 100        |

**Table 4-8 Minimum Right Turn Deceleration Lengths**

The Thompson Bridge Road site access should be constructed with one entering and one exiting lane and the exiting approach should be controlled by stop sign and accompanying stop bar. As discussed above, consideration should be given to prohibiting exiting left turns at this driveway. The project site engineer is referred to the Georgia DOT Driveway Manual for other driveway design standards including driveway width, island design, and curb return radii.

The site access on Enota Avenue is not located on a Georgia state route and, therefore, Georgia DOT design standards do not apply. This access is located approximately mid-way along the site's Enota frontage. This design is logical since it places the access approximately at the front of the convenience store building. The potential does exist for entering left turners to block the westbound through movement on Enota Avenue. However, due to the low entering left turn volume (6 in the a.m. peak hour, 5 in the p.m. peak hour), this potential is minimal.

The Enota Avenue site access should be constructed with one entering and one exiting lane and the exiting approach should be controlled by stop sign and accompanying stop bar. It is also noted that there is a grade differential between the site and Enota Avenue at the location of the existing access, creating a steep grade and acute crown in the existing apron. This should be addressed by the proposed site plan.

## Conclusions and Recommendations

The traffic impact of this proposed convenience store with gasoline pumps will occur primarily at the site driveways. The impact at adjacent intersections will be minimal to negligible. The reason the impact is so minimal is that the majority of trips to and from the site will be pass-by trips. The nature of this type of convenience store and gasoline station is to attract vehicles that are already passing by the site – it is minimally destination-oriented. Of those trips that are driving specifically to this store, most will be generated very locally. It is improbable that more than just a few trips will travel specifically to this store from more than about one to two miles. Therefore, the new trips from this project at most study intersections will be very low, having minimal effect on traffic operations. The following is a summary of the conclusions and recommendations of at each intersection:

- 1. Thompson Bridge Road at Walmart / Taco Bell** – This intersection operates well in the existing a.m. and p.m. and will continue to operate well in the future. The pedestrian signal head in the southeast corner (closest to Taco Bell), for pedestrians crossing the Taco Bell access, is very difficult to see in daylight and it is recommended that this pedestrian signal head be adjusted to improve its visibility. It is also noted that the southbound approach of Thompson Bridge Road does not include an exclusive right turn lane to serve the Walmart access. Based on the southbound right turn volume and the given conditions, a southbound right turn lane would be justified at this location according to Georgia DOT standards.
- 2. Thompson Bridge Road at Enota Avenue** – The analysis of the Thompson Bridge / Enota intersection shows an overall acceptable level of service in both the existing and future conditions. The side street approaches on Enota Avenue operate at LOS E, primarily due to the greentime on the signal favoring the Thompson Bridge Road approaches. Shorter cycle lengths would reduce delays and side street queuing. While there are crosswalks and pedestrian signals on all approaches at this signalized intersection, only the northeast corner has an ADA accessible ramp. Consideration should be given to adding ADA ramps on the remaining corners. The crosswalk and stop bar striping is also in poor condition and should be refreshed.
- 3. Enota Avenue at Riverside Drive** – This all-way stop intersection currently operates well in the a.m., but at LOS F in the p.m. In the future, these delays will increase. It is recommended that a signal warrant analysis be performed for this intersection according to the standards proscribed in the Federal Highway Administration's *Manual On Uniform Traffic Control Devices* (MUTCD). Should signalization be justified, consideration could be given to providing approach turn lanes, as appropriate. A roundabout is an alternative method of control that merits consideration at this intersection.
- 4. GA 11 Bus at South Enota Avenue** – The existing northbound right turn volumes (114 a.m., 48 p.m.) and, even more significantly, the southbound right turn volumes (171 a.m., 250 p.m.) on GA 11 Bus justify the addition of exclusive right turn lanes.
- 5. GA 60 (Thompson Bridge Road / Green Street) at GA 11 Business** – This intersection generally operates acceptably with the existing lanes and control, and will continue to operate acceptably in the future.

The southbound right turn volume into Holly Drive operates beyond the signal control. The volume of these right turners are high enough to justify a southbound exclusive right turn lane on GA 60, according to Georgia DOT standards. No other mitigation is recommended at this intersection.

**6. GA 60 (Green Street) at Ridgewood Avenue** – This overall intersection operates acceptably, especially given the tight urban design and lack of exclusive turn lanes, but delays are high at times on the eastbound approach of Ridgewood. Ideally, from a traffic operations perspective, this intersection would be widened to include a northbound exclusive left turn lane on GA 60, a second eastbound lane on Ridgewood, and a southbound right turn lane on GA 60. These changes would reduce overall delays and eliminate the LOS F on the Ridgewood approach. However, it is acknowledged that this widening would alter the historic character of this intersection. Therefore, these improvements are suggested for consideration in the context of the overall character and goals of the community.

**7. Thompson Bridge Road at Site Access** – The site plan calls for the elimination of two of the three existing site accesses on Thompson Bridge Road. This will reduce the number of conflict points. It is likely that most vehicles that wish to travel either northbound on Thompson Bridge or to the east on Enota will exit the site at the Enota driveway and capitalize on the protection of the adjacent signal. Because of the difficulty in making this left turn from the site driveway, and the low numbers of vehicles expected to do so, consideration should be given to prohibiting exiting left turns from this driveway. The Georgia DOT access standards were reviewed for this intersection (Thompson Bridge is Georgia State Route 60) and indicate that the access justifies a southbound exclusive right turn lane. The spacing of this driveway from Enota Avenue does not meet the minimum Georgia DOT driveway spacing standards. It is recommended that these design factors be discussed with Georgia DOT and the City to determine an acceptable solution. The Thompson Bridge Road site access should be constructed with one entering and one exiting lane and the exiting approach should be controlled by stop sign and accompanying stop bar. The project site engineer is referred to the Georgia DOT Driveway Manual for other driveway design standards including driveway width, island design, and curb return radii.

**8. Enota Avenue at Site Access** – The site access on Enota is projected to operate with low volumes and very low delays. Most of the site entering trips will enter at the Thompson Bridge access, so that the entering left turns at the Enota driveway are projected at only 6 vehicles in the a.m. peak hour and 5 in the p.m. peak hour. This should minimally impede westbound through flow on Enota. The eastbound right turns entering the site are also minimal, at 5 for the a.m. peak hour and 8 for the p.m. peak hour. This also should minimally impede flows on Enota. The Enota Avenue site access should be constructed with one entering and one exiting lane and the exiting approach should be controlled by stop sign and accompanying stop bar. The existing grade differential between the site and Enota Avenue at the location of the site access should be corrected when the site is developed.

## Appendix A

### Traffic Count Data and Volume Worksheets

# Thompson Bridge Road at Enota Avenue Convenience Store Traffic Impact Study

City of Gainesville, Georgia

April 2017

## Intersection: 1. Thompson Bridge Road at Walmart/Taco Bell

| Weekday A.M. Peak Hour                     | Northbound Thompson Bridge Road |      |      |     | Southbound Thompson Bridge Road |      |      |      | Eastbound Walmart Access |      |      |     | Westbound Taco Bell Access |      |      |     |
|--------------------------------------------|---------------------------------|------|------|-----|---------------------------------|------|------|------|--------------------------|------|------|-----|----------------------------|------|------|-----|
|                                            | L                               | T    | R    | Tot | L                               | T    | R    | Tot  | L                        | T    | R    | Tot | L                          | T    | R    | Tot |
| Counted Volumes (Thursday, March 30, 2017) | 52                              | 881  | 1    | 934 | 6                               | 1877 | 80   | 1963 | 38                       | 0    | 64   | 102 | 3                          | 1    | 4    | 8   |
| Total Annual Background Growth             | 6.1%                            | 6.1% | 6.1% |     | 6.1%                            | 6.1% | 6.1% |      | 6.1%                     | 6.1% | 6.1% |     | 6.1%                       | 6.1% | 6.1% |     |
| No-Build Volumes                           | 55                              | 935  | 1    | 991 | 6                               | 1991 | 85   | 2083 | 40                       | 0    | 68   | 108 | 3                          | 1    | 4    | 8   |
| Proposed Convenience Store New Trips       | 0                               | 4    | 0    | 4   | 0                               | 4    | 0    | 4    | 0                        | 0    | 0    | 0   | 0                          | 0    | 0    | 0   |
| Build Volumes                              | 55                              | 939  | 1    | 995 | 6                               | 1995 | 85   | 2087 | 40                       | 0    | 68   | 108 | 3                          | 1    | 4    | 8   |

| Weekday P.M. Peak Hour                     | Northbound Thompson Bridge Road |      |      |      | Southbound Thompson Bridge Road |      |      |      | Eastbound Walmart Access |      |      |     | Westbound Taco Bell Access |      |      |     |
|--------------------------------------------|---------------------------------|------|------|------|---------------------------------|------|------|------|--------------------------|------|------|-----|----------------------------|------|------|-----|
|                                            | L                               | T    | R    | Tot  | L                               | T    | R    | Tot  | L                        | T    | R    | Tot | L                          | T    | R    | Tot |
| Counted Volumes (Thursday, March 30, 2017) | 57                              | 1973 | 20   | 2050 | 13                              | 1101 | 54   | 1168 | 71                       | 3    | 37   | 111 | 14                         | 2    | 25   | 41  |
| Total Annual Background Growth             | 6.1%                            | 6.1% | 6.1% |      | 6.1%                            | 6.1% | 6.1% |      | 6.1%                     | 6.1% | 6.1% |     | 6.1%                       | 6.1% | 6.1% |     |
| No-Build Volumes                           | 60                              | 2093 | 21   | 2175 | 14                              | 1168 | 57   | 1239 | 75                       | 3    | 39   | 118 | 15                         | 2    | 27   | 44  |
| Proposed Convenience Store New Trips       | 0                               | 4    | 0    | 4    | 0                               | 4    | 0    | 4    | 0                        | 0    | 0    | 0   | 0                          | 0    | 0    | 0   |
| Build Volumes                              | 60                              | 2097 | 21   | 2179 | 14                              | 1172 | 57   | 1243 | 75                       | 3    | 39   | 118 | 15                         | 2    | 27   | 44  |

MARC R. ACAMPORA, PE, LLC



**Thompson Bridge Road at Enota Avenue Convenience Store Traffic Impact Study**  
City of Gainesville, Georgia

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**Intersection: 2. Thompson Bridge Road at Enota Avenue**

| Weekday A.M. Peak Hour                               | Northbound Thompson Bridge Road |            |           |            | Southbound Thompson Bridge Road |             |           |             | Eastbound Enota Avenue |           |           |            | Westbound Enota Avenue |           |            |            |
|------------------------------------------------------|---------------------------------|------------|-----------|------------|---------------------------------|-------------|-----------|-------------|------------------------|-----------|-----------|------------|------------------------|-----------|------------|------------|
|                                                      | L                               | T          | R         | Tot        | L                               | T           | R         | Tot         | L                      | T         | R         | Tot        | L                      | T         | R          | Tot        |
| <b>Counted Volumes (Thursday, February 16, 2017)</b> | 17                              | 734        | 26        | 777        | 313                             | 1604        | 32        | 1949        | 53                     | 51        | 29        | 133        | 45                     | 27        | 167        | 239        |
| Total Annual Background Growth                       | 6.1%                            | 6.1%       | 6.1%      |            | 6.1%                            | 6.1%        | 6.1%      |             | 6.1%                   | 6.1%      | 6.1%      |            | 6.1%                   | 6.1%      | 6.1%       |            |
| <b>No-Build Volumes</b>                              | <b>18</b>                       | <b>779</b> | <b>28</b> | <b>824</b> | <b>332</b>                      | <b>1702</b> | <b>34</b> | <b>2068</b> | <b>56</b>              | <b>54</b> | <b>31</b> | <b>141</b> | <b>48</b>              | <b>29</b> | <b>177</b> | <b>254</b> |
| Proposed Convenience Store New Trips                 | 0                               | 0          | 0         | 0          | 0                               | 4           | 0         | 4           | 4                      | 8         | 0         | 12         | 5                      | 4         | 0          | 9          |
| Proposed Convenience Store Pass-by Trips             | 0                               | 0          | 0         | 0          | 0                               | 0           | 0         | 0           | 12                     | 0         | 0         | 12         | 0                      | 0         | 0          | 0          |
| Total Convenience Store Trips                        | 0                               | 0          | 0         | 0          | 0                               | 4           | 0         | 4           | 16                     | 8         | 0         | 24         | 5                      | 4         | 0          | 9          |
| <b>Build Volumes</b>                                 | <b>18</b>                       | <b>779</b> | <b>28</b> | <b>824</b> | <b>332</b>                      | <b>1706</b> | <b>34</b> | <b>2072</b> | <b>72</b>              | <b>62</b> | <b>31</b> | <b>165</b> | <b>53</b>              | <b>33</b> | <b>177</b> | <b>263</b> |

| Weekday P.M. Peak Hour                               | Northbound Thompson Bridge Road |             |           |             | Southbound Thompson Bridge Road |             |           |             | Eastbound Enota Avenue |           |           |            | Westbound Enota Avenue |           |            |            |
|------------------------------------------------------|---------------------------------|-------------|-----------|-------------|---------------------------------|-------------|-----------|-------------|------------------------|-----------|-----------|------------|------------------------|-----------|------------|------------|
|                                                      | L                               | T           | R         | Tot         | L                               | T           | R         | Tot         | L                      | T         | R         | Tot        | L                      | T         | R          | Tot        |
| <b>Counted Volumes (Thursday, February 16, 2017)</b> | 17                              | 1573        | 36        | 1626        | 215                             | 942         | 26        | 1183        | 161                    | 82        | 13        | 256        | 55                     | 51        | 359        | 465        |
| Total Annual Background Growth                       | 6.1%                            | 6.1%        | 6.1%      |             | 6.1%                            | 6.1%        | 6.1%      |             | 6.1%                   | 6.1%      | 6.1%      |            | 6.1%                   | 6.1%      | 6.1%       |            |
| <b>No-Build Volumes</b>                              | <b>18</b>                       | <b>1669</b> | <b>38</b> | <b>1725</b> | <b>228</b>                      | <b>999</b>  | <b>28</b> | <b>1255</b> | <b>171</b>             | <b>87</b> | <b>14</b> | <b>272</b> | <b>58</b>              | <b>54</b> | <b>381</b> | <b>493</b> |
| Proposed Convenience Store New Trips                 | 0                               | 0           | 0         | 0           | 0                               | 4           | 0         | 4           | 4                      | 9         | 0         | 13         | 5                      | 4         | 0          | 9          |
| Proposed Convenience Store Pass-by Trips             | 0                               | 0           | 0         | 0           | 0                               | 0           | 0         | 0           | 27                     | 0         | 0         | 27         | 0                      | 0         | 0          | 0          |
| Total Convenience Store Trips                        | 0                               | 0           | 0         | 0           | 0                               | 4           | 0         | 4           | 31                     | 9         | 0         | 40         | 5                      | 4         | 0          | 9          |
| <b>Build Volumes</b>                                 | <b>18</b>                       | <b>1669</b> | <b>38</b> | <b>1725</b> | <b>228</b>                      | <b>1003</b> | <b>28</b> | <b>1259</b> | <b>202</b>             | <b>96</b> | <b>14</b> | <b>312</b> | <b>63</b>              | <b>58</b> | <b>381</b> | <b>502</b> |

**MARC R. ACAMPORA, PE, LLC**

**Thompson Bridge Road at Enota Avenue Convenience Store Traffic Impact Study**  
City of Gainesville, Georgia

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**Intersection: 3. Enota Avenue at Riverside Drive**

| Weekday A.M. Peak Hour                            | Northbound Riverside Drive |           |           |            | Southbound Riverside Drive |            |           |            | Eastbound Enota Avenue |            |          |            | Westbound Enota Avenue |            |           |            |
|---------------------------------------------------|----------------------------|-----------|-----------|------------|----------------------------|------------|-----------|------------|------------------------|------------|----------|------------|------------------------|------------|-----------|------------|
|                                                   | L                          | T         | R         | Tot        | L                          | T          | R         | Tot        | L                      | T          | R        | Tot        | L                      | T          | R         | Tot        |
| <b>Counted Volumes (Thursday, March 30, 2017)</b> | 9                          | 55        | 65        | 129        | 137                        | 122        | 16        | 275        | 9                      | 305        | 7        | 321        | 45                     | 200        | 40        | 285        |
| Total Annual Background Growth                    | 6.1%                       | 6.1%      | 6.1%      |            | 6.1%                       | 6.1%       | 6.1%      |            | 6.1%                   | 6.1%       | 6.1%     |            | 6.1%                   | 6.1%       | 6.1%      |            |
| <b>No-Build Volumes</b>                           | <b>10</b>                  | <b>58</b> | <b>69</b> | <b>137</b> | <b>145</b>                 | <b>129</b> | <b>17</b> | <b>292</b> | <b>10</b>              | <b>324</b> | <b>7</b> | <b>341</b> | <b>48</b>              | <b>212</b> | <b>42</b> | <b>302</b> |
| Proposed Convenience Store New Trips              | 1                          | 0         | 0         | 1          | 0                          | 0          | 2         | 2          | 2                      | 5          | 1        | 8          | 0                      | 6          | 0         | 6          |
| <b>Build Volumes</b>                              | <b>11</b>                  | <b>58</b> | <b>69</b> | <b>138</b> | <b>145</b>                 | <b>129</b> | <b>19</b> | <b>294</b> | <b>12</b>              | <b>329</b> | <b>8</b> | <b>349</b> | <b>48</b>              | <b>218</b> | <b>42</b> | <b>308</b> |

| Weekday P.M. Peak Hour                            | Northbound Riverside Drive |            |           |            | Southbound Riverside Drive |           |           |            | Eastbound Enota Avenue |            |           |            | Westbound Enota Avenue |            |            |            |
|---------------------------------------------------|----------------------------|------------|-----------|------------|----------------------------|-----------|-----------|------------|------------------------|------------|-----------|------------|------------------------|------------|------------|------------|
|                                                   | L                          | T          | R         | Tot        | L                          | T         | R         | Tot        | L                      | T          | R         | Tot        | L                      | T          | R          | Tot        |
| <b>Counted Volumes (Thursday, March 30, 2017)</b> | 22                         | 342        | 37        | 401        | 59                         | 66        | 29        | 154        | 67                     | 306        | 10        | 383        | 26                     | 312        | 109        | 447        |
| Total Annual Background Growth                    | 6.1%                       | 6.1%       | 6.1%      |            | 6.1%                       | 6.1%      | 6.1%      |            | 6.1%                   | 6.1%       | 6.1%      |            | 6.1%                   | 6.1%       | 6.1%       |            |
| <b>No-Build Volumes</b>                           | <b>23</b>                  | <b>363</b> | <b>39</b> | <b>425</b> | <b>63</b>                  | <b>70</b> | <b>31</b> | <b>163</b> | <b>71</b>              | <b>325</b> | <b>11</b> | <b>406</b> | <b>28</b>              | <b>331</b> | <b>116</b> | <b>474</b> |
| Proposed Convenience Store New Trips              | 1                          | 0          | 0         | 1          | 0                          | 0         | 2         | 2          | 2                      | 6          | 1         | 9          | 0                      | 6          | 0          | 6          |
| <b>Build Volumes</b>                              | <b>24</b>                  | <b>363</b> | <b>39</b> | <b>426</b> | <b>63</b>                  | <b>70</b> | <b>33</b> | <b>165</b> | <b>73</b>              | <b>331</b> | <b>12</b> | <b>415</b> | <b>28</b>              | <b>337</b> | <b>116</b> | <b>480</b> |

**MARC R. ACAMPORA, PE, LLC**

**Thompson Bridge Road at Enota Avenue Convenience Store Traffic Impact Study**  
City of Gainesville, Georgia

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**Intersection: 4. GA 11 Business at South Enota Avenue**

| Weekday A.M. Peak Hour                            | Northbound GA 11 Business |            |            |            | Southbound GA 11 Business |            |            |             | Eastbound South Enota Avenue |            |           |            | Westbound South Enota Avenue |            |           |            |
|---------------------------------------------------|---------------------------|------------|------------|------------|---------------------------|------------|------------|-------------|------------------------------|------------|-----------|------------|------------------------------|------------|-----------|------------|
|                                                   | L                         | T          | R          | Tot        | L                         | T          | R          | Tot         | L                            | T          | R         | Tot        | L                            | T          | R         | Tot        |
| <b>Counted Volumes (Thursday, March 30, 2017)</b> | 12                        | 448        | 114        | 574        | 245                       | 852        | 171        | 1268        | 272                          | 254        | 34        | 560        | 81                           | 127        | 86        | 294        |
| Total Annual Background Growth                    | 6.1%                      | 6.1%       | 6.1%       |            | 6.1%                      | 6.1%       | 6.1%       |             | 6.1%                         | 6.1%       | 6.1%      |            | 6.1%                         | 6.1%       | 6.1%      |            |
| <b>No-Build Volumes</b>                           | <b>13</b>                 | <b>475</b> | <b>121</b> | <b>609</b> | <b>260</b>                | <b>904</b> | <b>181</b> | <b>1345</b> | <b>289</b>                   | <b>269</b> | <b>36</b> | <b>594</b> | <b>86</b>                    | <b>135</b> | <b>91</b> | <b>312</b> |
| Proposed Convenience Store New Trips              | 1                         | 0          | 0          | 1          | 0                         | 0          | 2          | 2           | 2                            | 2          | 1         | 5          | 0                            | 3          | 0         | 3          |
| <b>Build Volumes</b>                              | <b>14</b>                 | <b>475</b> | <b>121</b> | <b>610</b> | <b>260</b>                | <b>904</b> | <b>183</b> | <b>1347</b> | <b>291</b>                   | <b>271</b> | <b>37</b> | <b>599</b> | <b>86</b>                    | <b>138</b> | <b>91</b> | <b>315</b> |

| Weekday P.M. Peak Hour                            | Northbound GA 11 Business |            |           |            | Southbound GA 11 Business |            |            |            | Eastbound South Enota Avenue |            |           |            | Westbound South Enota Avenue |            |            |            |
|---------------------------------------------------|---------------------------|------------|-----------|------------|---------------------------|------------|------------|------------|------------------------------|------------|-----------|------------|------------------------------|------------|------------|------------|
|                                                   | L                         | T          | R         | Tot        | L                         | T          | R          | Tot        | L                            | T          | R         | Tot        | L                            | T          | R          | Tot        |
| <b>Counted Volumes (Thursday, March 30, 2017)</b> | 17                        | 584        | 48        | 649        | 106                       | 579        | 250        | 935        | 231                          | 142        | 28        | 401        | 237                          | 341        | 354        | 932        |
| Total Annual Background Growth                    | 6.1%                      | 6.1%       | 6.1%      |            | 6.1%                      | 6.1%       | 6.1%       |            | 6.1%                         | 6.1%       | 6.1%      |            | 6.1%                         | 6.1%       | 6.1%       |            |
| <b>No-Build Volumes</b>                           | <b>18</b>                 | <b>620</b> | <b>51</b> | <b>689</b> | <b>112</b>                | <b>614</b> | <b>265</b> | <b>992</b> | <b>245</b>                   | <b>151</b> | <b>30</b> | <b>425</b> | <b>251</b>                   | <b>362</b> | <b>376</b> | <b>989</b> |
| Proposed Convenience Store New Trips              | 1                         | 0          | 0         | 1          | 0                         | 0          | 2          | 2          | 2                            | 2          | 1         | 5          | 0                            | 3          | 0          | 3          |
| <b>Build Volumes</b>                              | <b>19</b>                 | <b>620</b> | <b>51</b> | <b>690</b> | <b>112</b>                | <b>614</b> | <b>267</b> | <b>994</b> | <b>247</b>                   | <b>153</b> | <b>31</b> | <b>430</b> | <b>251</b>                   | <b>365</b> | <b>376</b> | <b>992</b> |

**MARC R. ACAMPORA, PE, LLC**

**Thompson Bridge Road at Enota Avenue Convenience Store Traffic Impact Study**  
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**Intersection: 5. GA 60 at GA 11 Business**

| Weekday A.M. Peak Hour                                | Northbound GA 60 |            |            |             | Southbound GA 60 |             |            |             | Eastbound Holly Drive |          |           |           | Westbound GA 11 Business |            |          |            |
|-------------------------------------------------------|------------------|------------|------------|-------------|------------------|-------------|------------|-------------|-----------------------|----------|-----------|-----------|--------------------------|------------|----------|------------|
|                                                       | L                | T          | R          | Tot         | L                | T           | R          | Tot         | L                     | T        | R         | Tot       | L                        | T          | R        | Tot        |
| <b>Counted Volumes (Wednesday, February 22, 2017)</b> | 19               | 683        | 296        | 998         | 0                | 1391        | 132        | 1523        | 0                     | 0        | 53        | 53        | 461                      | 189        | 0        | 650        |
| Total Annual Background Growth                        | 6.1%             | 6.1%       | 6.1%       |             | 6.1%             | 6.1%        | 6.1%       |             | 6.1%                  | 6.1%     | 6.1%      |           | 6.1%                     | 6.1%       | 6.1%     |            |
| <b>No-Build Volumes</b>                               | <b>20</b>        | <b>725</b> | <b>314</b> | <b>1059</b> | <b>0</b>         | <b>1476</b> | <b>140</b> | <b>1616</b> | <b>0</b>              | <b>0</b> | <b>56</b> | <b>56</b> | <b>489</b>               | <b>201</b> | <b>0</b> | <b>690</b> |
| Proposed Convenience Store New Trips                  | 0                | 9          | 0          | 9           | 0                | 9           | 0          | 9           | 0                     | 0        | 0         | 0         | 0                        | 0          | 0        | 0          |
| <b>Build Volumes</b>                                  | <b>20</b>        | <b>734</b> | <b>314</b> | <b>1068</b> | <b>0</b>         | <b>1485</b> | <b>140</b> | <b>1625</b> | <b>0</b>              | <b>0</b> | <b>56</b> | <b>56</b> | <b>489</b>               | <b>201</b> | <b>0</b> | <b>690</b> |

| Weekday P.M. Peak Hour                                | Northbound GA 60 |             |            |             | Southbound GA 60 |            |            |             | Eastbound Holly Drive |          |           |           | Westbound GA 11 Business |            |          |            |
|-------------------------------------------------------|------------------|-------------|------------|-------------|------------------|------------|------------|-------------|-----------------------|----------|-----------|-----------|--------------------------|------------|----------|------------|
|                                                       | L                | T           | R          | Tot         | L                | T          | R          | Tot         | L                     | T        | R         | Tot       | L                        | T          | R        | Tot        |
| <b>Counted Volumes (Wednesday, February 22, 2017)</b> | 46               | 1412        | 653        | 2111        | 0                | 812        | 125        | 937         | 0                     | 0        | 35        | 35        | 387                      | 218        | 0        | 605        |
| Total Annual Background Growth                        | 6.1%             | 6.1%        | 6.1%       |             | 6.1%             | 6.1%       | 6.1%       |             | 6.1%                  | 6.1%     | 6.1%      |           | 6.1%                     | 6.1%       | 6.1%     |            |
| <b>No-Build Volumes</b>                               | <b>49</b>        | <b>1498</b> | <b>693</b> | <b>2240</b> | <b>0</b>         | <b>862</b> | <b>133</b> | <b>994</b>  | <b>0</b>              | <b>0</b> | <b>37</b> | <b>37</b> | <b>411</b>               | <b>231</b> | <b>0</b> | <b>642</b> |
| Proposed Convenience Store New Trips                  | 0                | 10          | 0          | 10          | 0                | 10         | 0          | 10          | 0                     | 0        | 0         | 0         | 0                        | 0          | 0        | 0          |
| <b>Build Volumes</b>                                  | <b>49</b>        | <b>1508</b> | <b>693</b> | <b>2250</b> | <b>0</b>         | <b>872</b> | <b>133</b> | <b>1004</b> | <b>0</b>              | <b>0</b> | <b>37</b> | <b>37</b> | <b>411</b>               | <b>231</b> | <b>0</b> | <b>642</b> |

**MARC R. ACAMPORA, PE, LLC**

**Thompson Bridge Road at Enota Avenue Convenience Store Traffic Impact Study**  
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**Intersection: 6. GA 60 at Ridgewood Avenue**

| Weekday A.M. Peak Hour                                | Northbound GA 60 |            |           |            | Southbound GA 60 |             |           |             | Eastbound Ridgewood Avenue |          |           |            | Westbound Driveway |          |          |           |
|-------------------------------------------------------|------------------|------------|-----------|------------|------------------|-------------|-----------|-------------|----------------------------|----------|-----------|------------|--------------------|----------|----------|-----------|
|                                                       | L                | T          | R         | Tot        | L                | T           | R         | Tot         | L                          | T        | R         | Tot        | L                  | T        | R        | Tot       |
| <b>Counted Volumes (Wednesday, February 22, 2017)</b> | 14               | 878        | 11        | 903        | 4                | 1798        | 63        | 1865        | 131                        | 5        | 22        | 158        | 6                  | 6        | 2        | 14        |
| Total Annual Background Growth                        | 6.1%             | 6.1%       | 6.1%      |            | 6.1%             | 6.1%        | 6.1%      |             | 6.1%                       | 6.1%     | 6.1%      |            | 6.1%               | 6.1%     | 6.1%     |           |
| <b>No-Build Volumes</b>                               | <b>15</b>        | <b>932</b> | <b>12</b> | <b>958</b> | <b>4</b>         | <b>1908</b> | <b>67</b> | <b>1979</b> | <b>139</b>                 | <b>5</b> | <b>23</b> | <b>168</b> | <b>6</b>           | <b>6</b> | <b>2</b> | <b>15</b> |
| Proposed Convenience Store New Trips                  | 0                | 7          | 0         | 7          | 0                | 7           | 2         | 9           | 2                          | 0        | 0         | 2          | 0                  | 0        | 0        | 0         |
| <b>Build Volumes</b>                                  | <b>15</b>        | <b>939</b> | <b>12</b> | <b>965</b> | <b>4</b>         | <b>1915</b> | <b>69</b> | <b>1988</b> | <b>141</b>                 | <b>5</b> | <b>23</b> | <b>170</b> | <b>6</b>           | <b>6</b> | <b>2</b> | <b>15</b> |

| Weekday P.M. Peak Hour                                | Northbound GA 60 |             |           |             | Southbound GA 60 |             |           |             | Eastbound Ridgewood Avenue |          |           |            | Westbound Driveway |           |          |           |
|-------------------------------------------------------|------------------|-------------|-----------|-------------|------------------|-------------|-----------|-------------|----------------------------|----------|-----------|------------|--------------------|-----------|----------|-----------|
|                                                       | L                | T           | R         | Tot         | L                | T           | R         | Tot         | L                          | T        | R         | Tot        | L                  | T         | R        | Tot       |
| <b>Counted Volumes (Wednesday, February 22, 2017)</b> | 23               | 1849        | 10        | 1882        | 0                | 1097        | 73        | 1170        | 252                        | 8        | 20        | 280        | 11                 | 14        | 5        | 30        |
| Total Annual Background Growth                        | 6.1%             | 6.1%        | 6.1%      |             | 6.1%             | 6.1%        | 6.1%      |             | 6.1%                       | 6.1%     | 6.1%      |            | 6.1%               | 6.1%      | 6.1%     |           |
| <b>No-Build Volumes</b>                               | <b>24</b>        | <b>1962</b> | <b>11</b> | <b>1997</b> | <b>0</b>         | <b>1164</b> | <b>77</b> | <b>1241</b> | <b>267</b>                 | <b>8</b> | <b>21</b> | <b>297</b> | <b>12</b>          | <b>15</b> | <b>5</b> | <b>32</b> |
| Proposed Convenience Store New Trips                  | 0                | 7           | 0         | 7           | 0                | 7           | 3         | 10          | 3                          | 0        | 0         | 3          | 0                  | 0         | 0        | 0         |
| <b>Build Volumes</b>                                  | <b>24</b>        | <b>1969</b> | <b>11</b> | <b>2004</b> | <b>0</b>         | <b>1171</b> | <b>80</b> | <b>1251</b> | <b>270</b>                 | <b>8</b> | <b>21</b> | <b>300</b> | <b>12</b>          | <b>15</b> | <b>5</b> | <b>32</b> |

**MARC R. ACAMPORA, PE, LLC**

**Thompson Bridge Road at Enota Avenue Convenience Store Traffic Impact Study**  
City of Gainesville, Georgia

April 2017

**Intersection: 7. Thompson Bridge Road at Site Access**

| Weekday A.M. Peak Hour                        | Northbound Thompson Bridge Road |            |            | Southbound Thompson Bridge Road |             |             | Eastbound Site Access |           |           |  |
|-----------------------------------------------|---------------------------------|------------|------------|---------------------------------|-------------|-------------|-----------------------|-----------|-----------|--|
|                                               | L                               | T          | Tot        | T                               | R           | Tot         | L                     | R         | Tot       |  |
| Counted Volumes (Thursday, February 16, 2017) |                                 | 777        | 777        |                                 | 1678        | 1678        |                       |           |           |  |
| Total Annual Background Growth                |                                 | 6.1%       |            |                                 | 6.1%        |             |                       |           |           |  |
| <b>No-Build Volumes</b>                       |                                 | <b>824</b> | <b>824</b> |                                 | <b>1780</b> | <b>1780</b> |                       |           |           |  |
| Proposed Convenience Store New Trips          | 9                               | 0          | 9          | 0                               | 9           | 9           | 0                     | 9         | 9         |  |
| Proposed Convenience Store Pass-by Trips      | 12                              | -12        | 0          | -26                             | 26          | 0           | 0                     | 26        | 26        |  |
| Total Convenience Store Trips                 | 21                              | -12        | 9          | -26                             | 35          | 9           | 0                     | 35        | 35        |  |
| <b>Build Volumes</b>                          | <b>21</b>                       | <b>812</b> | <b>833</b> | <b>1754</b>                     | <b>35</b>   | <b>1789</b> | <b>0</b>              | <b>35</b> | <b>35</b> |  |

| Weekday P.M. Peak Hour                        | Northbound Thompson Bridge Road |             |             | Southbound Thompson Bridge Road |             |             | Eastbound Site Access |           |           |  |
|-----------------------------------------------|---------------------------------|-------------|-------------|---------------------------------|-------------|-------------|-----------------------|-----------|-----------|--|
|                                               | L                               | T           | Tot         | T                               | R           | Tot         | L                     | R         | Tot       |  |
| Counted Volumes (Thursday, February 16, 2017) |                                 | 1626        | 1626        |                                 | 1010        | 1010        |                       |           |           |  |
| Total Annual Background Growth                |                                 | 6.1%        |             |                                 | 6.1%        |             |                       |           |           |  |
| <b>No-Build Volumes</b>                       |                                 | <b>1725</b> | <b>1725</b> |                                 | <b>1072</b> | <b>1072</b> |                       |           |           |  |
| Proposed Convenience Store New Trips          | 10                              | 0           | 10          | 0                               | 9           | 9           | 0                     | 10        | 10        |  |
| Proposed Convenience Store Pass-by Trips      | 27                              | -27         | 0           | -17                             | 17          | 0           | 0                     | 18        | 18        |  |
| Total Convenience Store Trips                 | 37                              | -27         | 10          | -17                             | 26          | 9           | 0                     | 28        | 28        |  |
| <b>Build Volumes</b>                          | <b>37</b>                       | <b>1698</b> | <b>1735</b> | <b>1055</b>                     | <b>26</b>   | <b>1081</b> | <b>0</b>              | <b>28</b> | <b>28</b> |  |

**MARC R. ACAMPORA, PE, LLC**

**Thompson Bridge Road at Enota Avenue Convenience Store Traffic Impact Study**  
City of Gainesville, Georgia

April 2017

**Intersection: 8. Enota Avenue at Site Access**

| Weekday A.M. Peak Hour                               | Northbound Site Access |           |           |  | Eastbound Enota Avenue |          |            | Westbound Enota Avenue |           |           |
|------------------------------------------------------|------------------------|-----------|-----------|--|------------------------|----------|------------|------------------------|-----------|-----------|
|                                                      | L                      | R         | Tot       |  | T                      | R        | Tot        | L                      | T         | Tot       |
| <b>Counted Volumes (Thursday, February 16, 2017)</b> |                        |           |           |  | 133                    |          | 133        |                        | 76        | 76        |
| Total Annual Background Growth                       |                        |           |           |  | 6.1%                   |          |            |                        | 6.1%      |           |
| <b>No-Build Volumes</b>                              |                        |           |           |  | <b>141</b>             |          | <b>141</b> |                        | <b>81</b> | <b>81</b> |
| Proposed Convenience Store New Trips                 | 3                      | 12        | 15        |  | 0                      | 3        | 3          | 4                      | 0         | 4         |
| Proposed Convenience Store Pass-by Trips             | 2                      | 14        | 16        |  | -2                     | 2        | 0          | 2                      | -2        | 0         |
| Total Convenience Store Trips                        | 5                      | 26        | 31        |  | -2                     | 5        | 3          | 6                      | -2        | 4         |
| <b>Build Volumes</b>                                 | <b>5</b>               | <b>26</b> | <b>31</b> |  | <b>139</b>             | <b>5</b> | <b>144</b> | <b>6</b>               | <b>79</b> | <b>85</b> |

| Weekday P.M. Peak Hour                               | Northbound Site Access |           |           |  | Eastbound Enota Avenue |          |            | Westbound Enota Avenue |            |            |
|------------------------------------------------------|------------------------|-----------|-----------|--|------------------------|----------|------------|------------------------|------------|------------|
|                                                      | L                      | R         | Tot       |  | T                      | R        | Tot        | L                      | T          | Tot        |
| <b>Counted Volumes (Thursday, February 16, 2017)</b> |                        |           |           |  | 256                    |          | 256        |                        | 94         | 94         |
| Total Annual Background Growth                       |                        |           |           |  | 6.1%                   |          |            |                        | 6.1%       |            |
| <b>No-Build Volumes</b>                              |                        |           |           |  | <b>272</b>             |          | <b>272</b> |                        | <b>100</b> | <b>100</b> |
| Proposed Convenience Store New Trips                 | 3                      | 13        | 16        |  | 0                      | 3        | 3          | 4                      | 0          | 4          |
| Proposed Convenience Store Pass-by Trips             | 1                      | 32        | 33        |  | -5                     | 5        | 0          | 1                      | -1         | 0          |
| Total Convenience Store Trips                        | 4                      | 45        | 49        |  | -5                     | 8        | 3          | 5                      | -1         | 4          |
| <b>Build Volumes</b>                                 | <b>4</b>               | <b>45</b> | <b>49</b> |  | <b>267</b>             | <b>8</b> | <b>275</b> | <b>5</b>               | <b>99</b>  | <b>104</b> |

**MARC R. ACAMPORA, PE, LLC**

# Reliable Traffic Data Services, LLC

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info@reliabletraffic.org | www.reliabletraffic.org

TMC Data  
Thompson Bridge Rd @ Walmart Drwy/  
Taco Bell Drwy, Gainesville, GA  
7-9am I 4-6pm

File Name : 40240001  
Site Code : 40240001  
Start Date : 3/30/2017  
Page No : 1

## Groups Printed- Cars, Buses and Trucks

|               | Thompson Bridge Rd Northbound |      |       |      |            | Thompson Bridge Rd Southbound |      |       |      |            | Walmart Drwy Eastbound |      |       |      |            | Taco Bell Drwy Westbound |      |       |      |            |            |
|---------------|-------------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|------------------------|------|-------|------|------------|--------------------------|------|-------|------|------------|------------|
| Start Time    | Left                          | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Left                   | Thru | Right | Peds | App. Total | Left                     | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 4                             | 150  | 0     | 0    | 154        | 0                             | 328  | 12    | 0    | 340        | 4                      | 0    | 13    | 0    | 17         | 0                        | 0    | 0     | 0    | 0          | 511        |
| 07:15 AM      | 9                             | 196  | 0     | 0    | 205        | 0                             | 435  | 18    | 0    | 453        | 7                      | 0    | 16    | 0    | 23         | 0                        | 0    | 0     | 0    | 0          | 681        |
| 07:30 AM      | 9                             | 212  | 0     | 0    | 221        | 1                             | 493  | 20    | 0    | 514        | 6                      | 0    | 14    | 0    | 20         | 0                        | 0    | 0     | 0    | 0          | 755        |
| 07:45 AM      | 17                            | 232  | 0     | 0    | 249        | 0                             | 524  | 21    | 0    | 545        | 11                     | 0    | 17    | 0    | 28         | 2                        | 1    | 0     | 0    | 3          | 825        |
| Total         | 39                            | 790  | 0     | 0    | 829        | 1                             | 1780 | 71    | 0    | 1852       | 28                     | 0    | 60    | 0    | 88         | 2                        | 1    | 0     | 0    | 3          | 2772       |
| 08:00 AM      | 14                            | 233  | 1     | 0    | 248        | 2                             | 429  | 22    | 0    | 453        | 10                     | 0    | 20    | 0    | 30         | 0                        | 0    | 2     | 0    | 2          | 733        |
| 08:15 AM      | 12                            | 204  | 0     | 0    | 216        | 3                             | 431  | 17    | 0    | 451        | 11                     | 0    | 13    | 0    | 24         | 1                        | 0    | 2     | 0    | 3          | 694        |
| 08:30 AM      | 8                             | 216  | 1     | 0    | 225        | 1                             | 397  | 14    | 0    | 412        | 9                      | 0    | 13    | 0    | 22         | 0                        | 1    | 0     | 0    | 1          | 660        |
| 08:45 AM      | 12                            | 209  | 0     | 0    | 221        | 0                             | 358  | 13    | 0    | 371        | 8                      | 0    | 21    | 0    | 29         | 0                        | 0    | 3     | 0    | 3          | 624        |
| Total         | 46                            | 862  | 2     | 0    | 910        | 6                             | 1615 | 66    | 0    | 1687       | 38                     | 0    | 67    | 0    | 105        | 1                        | 1    | 7     | 0    | 9          | 2711       |
| *** BREAK *** |                               |      |       |      |            |                               |      |       |      |            |                        |      |       |      |            |                          |      |       |      |            |            |
| 04:00 PM      | 17                            | 355  | 2     | 0    | 374        | 2                             | 252  | 23    | 0    | 277        | 16                     | 0    | 17    | 0    | 33         | 1                        | 0    | 2     | 0    | 3          | 687        |
| 04:15 PM      | 17                            | 400  | 8     | 0    | 425        | 3                             | 264  | 16    | 0    | 283        | 19                     | 1    | 16    | 0    | 36         | 6                        | 0    | 5     | 0    | 11         | 755        |
| 04:30 PM      | 16                            | 438  | 10    | 0    | 464        | 4                             | 253  | 16    | 0    | 273        | 11                     | 2    | 14    | 0    | 27         | 6                        | 2    | 6     | 0    | 14         | 778        |
| 04:45 PM      | 19                            | 465  | 5     | 0    | 489        | 3                             | 251  | 21    | 0    | 275        | 18                     | 2    | 16    | 0    | 36         | 3                        | 1    | 5     | 0    | 9          | 809        |
| Total         | 69                            | 1658 | 25    | 0    | 1752       | 12                            | 1020 | 76    | 0    | 1108       | 64                     | 5    | 63    | 0    | 132        | 16                       | 3    | 18    | 0    | 37         | 3029       |
| 05:00 PM      | 17                            | 524  | 9     | 0    | 550        | 3                             | 278  | 16    | 0    | 297        | 22                     | 0    | 12    | 0    | 34         | 7                        | 1    | 12    | 0    | 20         | 901        |
| 05:15 PM      | 10                            | 508  | 4     | 0    | 522        | 5                             | 290  | 10    | 0    | 305        | 26                     | 0    | 8     | 0    | 34         | 4                        | 0    | 6     | 0    | 10         | 871        |
| 05:30 PM      | 11                            | 476  | 2     | 0    | 489        | 2                             | 282  | 7     | 0    | 291        | 5                      | 1    | 1     | 0    | 7          | 0                        | 0    | 2     | 0    | 2          | 789        |
| 05:45 PM      | 1                             | 448  | 2     | 0    | 451        | 0                             | 301  | 3     | 0    | 304        | 2                      | 0    | 6     | 0    | 8          | 0                        | 0    | 2     | 0    | 2          | 765        |
| Total         | 39                            | 1956 | 17    | 0    | 2012       | 10                            | 1151 | 36    | 0    | 1197       | 55                     | 1    | 27    | 0    | 83         | 11                       | 1    | 22    | 0    | 34         | 3326       |
| Grand Total   | 193                           | 5266 | 44    | 0    | 5503       | 29                            | 5566 | 249   | 0    | 5844       | 185                    | 6    | 217   | 0    | 408        | 30                       | 6    | 47    | 0    | 83         | 11838      |
| Apprch %      | 3.5                           | 95.7 | 0.8   | 0    |            | 0.5                           | 95.2 | 4.3   | 0    |            | 45.3                   | 1.5  | 53.2  | 0    |            | 36.1                     | 7.2  | 56.6  | 0    |            |            |
| Total %       | 1.6                           | 44.5 | 0.4   | 0    | 46.5       | 0.2                           | 47   | 2.1   | 0    | 49.4       | 1.6                    | 0.1  | 1.8   | 0    | 3.4        | 0.3                      | 0.1  | 0.4   | 0    | 0.7        |            |



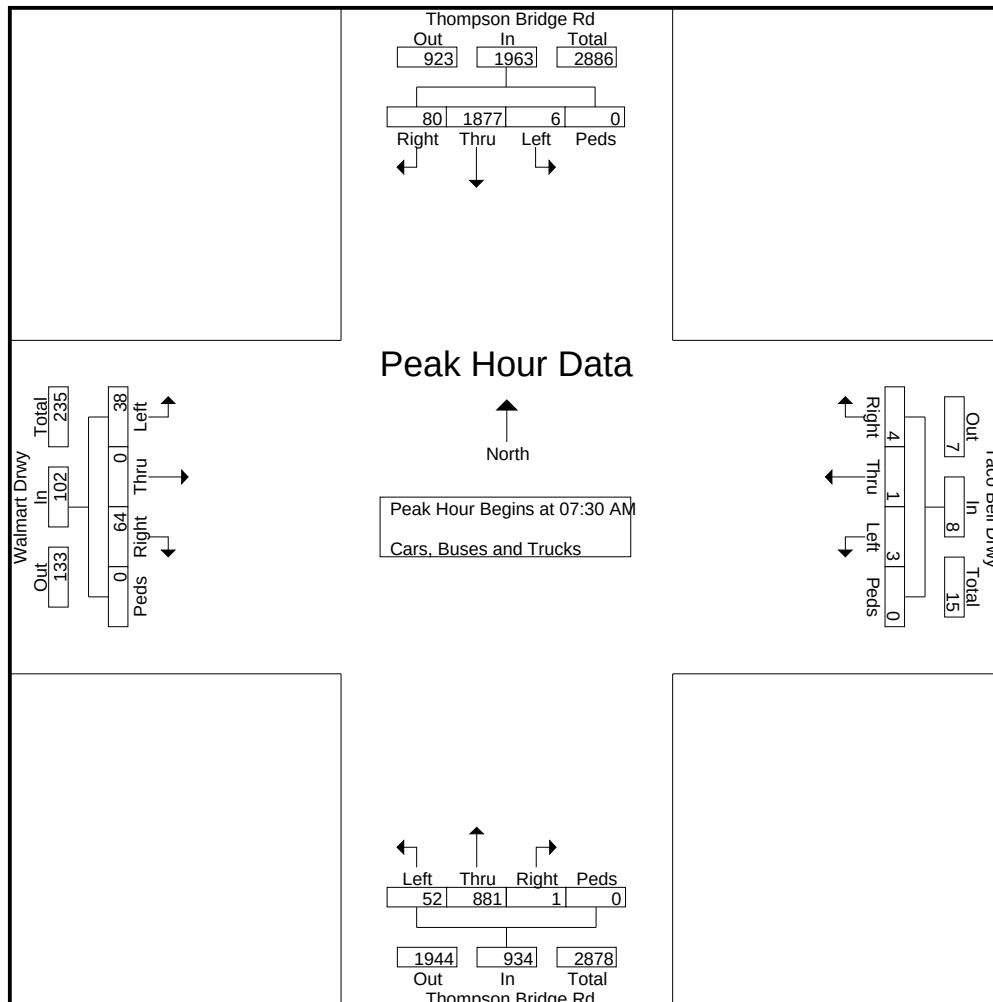
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TMC Data  
Thompson Bridge Rd @ Walmart Drwy/  
Taco Bell Drwy, Gainesville, GA  
7-9am I 4-6pm

File Name : 40240001  
Site Code : 40240001  
Start Date : 3/30/2017  
Page No : 2

|                                                            | Thompson Bridge Rd Northbound |      |       |      |            | Thompson Bridge Rd Southbound |      |       |      |            | Walmart Drwy Eastbound |      |       |      |            | Taco Bell Drwy Westbound |      |       |      |            |            |
|------------------------------------------------------------|-------------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|------------------------|------|-------|------|------------|--------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                          | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Left                   | Thru | Right | Peds | App. Total | Left                     | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                               |      |       |      |            |                               |      |       |      |            |                        |      |       |      |            |                          |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                               |      |       |      |            |                               |      |       |      |            |                        |      |       |      |            |                          |      |       |      |            |            |
| 07:30 AM                                                   | 9                             | 212  | 0     | 0    | 221        | 1                             | 493  | 20    | 0    | 514        | 6                      | 0    | 14    | 0    | 20         | 0                        | 0    | 0     | 0    | 0          | 755        |
| 07:45 AM                                                   | 17                            | 232  | 0     | 0    | 249        | 0                             | 524  | 21    | 0    | 545        | 11                     | 0    | 17    | 0    | 28         | 2                        | 1    | 0     | 0    | 3          | 825        |
| 08:00 AM                                                   | 14                            | 233  | 1     | 0    | 248        | 2                             | 429  | 22    | 0    | 453        | 10                     | 0    | 20    | 0    | 30         | 0                        | 0    | 2     | 0    | 2          | 733        |
| 08:15 AM                                                   | 12                            | 204  | 0     | 0    | 216        | 3                             | 431  | 17    | 0    | 451        | 11                     | 0    | 13    | 0    | 24         | 1                        | 0    | 2     | 0    | 3          | 694        |
| Total Volume                                               | 52                            | 881  | 1     | 0    | 934        | 6                             | 1877 | 80    | 0    | 1963       | 38                     | 0    | 64    | 0    | 102        | 3                        | 1    | 4     | 0    | 8          | 3007       |
| % App. Total                                               | 5.6                           | 94.3 | 0.1   | 0    |            | 0.3                           | 95.6 | 4.1   | 0    |            | 37.3                   | 0    | 62.7  | 0    |            | 37.5                     | 12.5 | 50    | 0    |            |            |
| PHF                                                        | .765                          | .945 | .250  | .000 | .938       | .500                          | .896 | .909  | .000 | .900       | .864                   | .000 | .800  | .000 | .850       | .375                     | .250 | .500  | .000 | .667       | .911       |



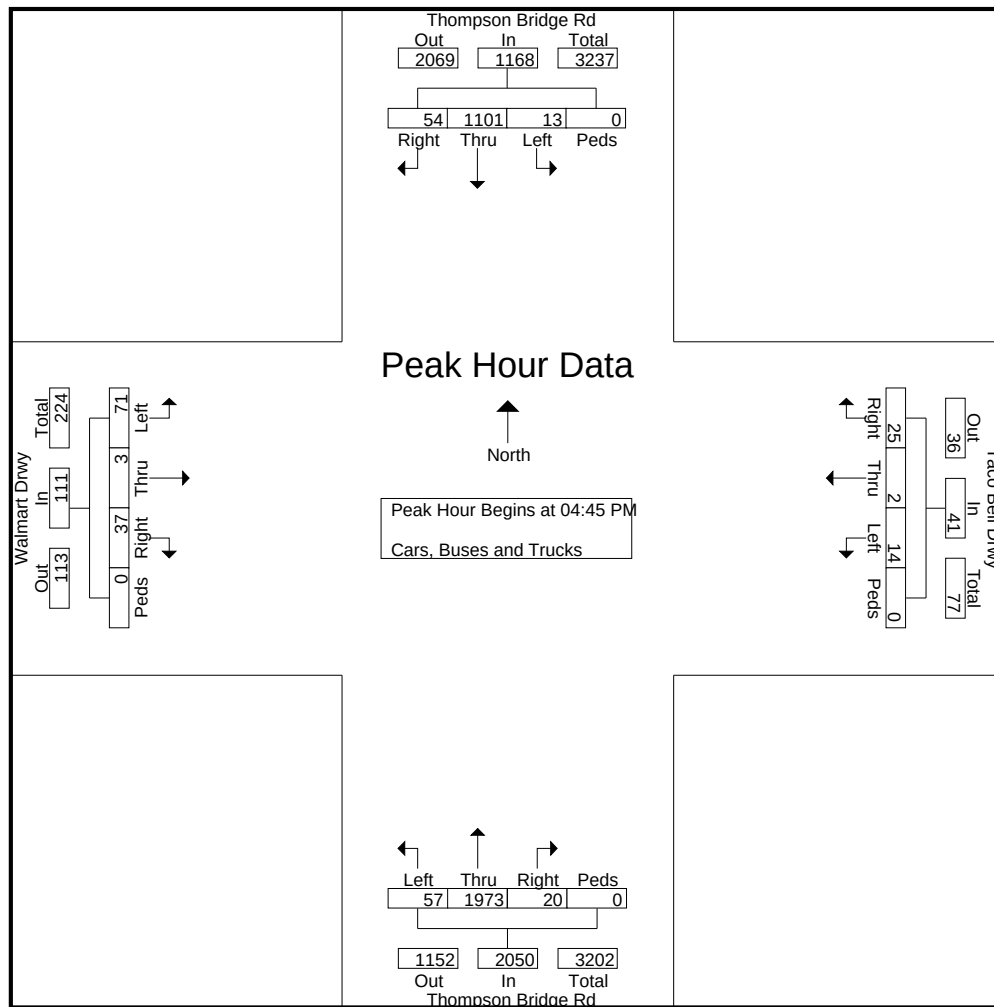
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TMC Data  
Thompson Bridge Rd @ Walmart Drwy/  
Taco Bell Drwy, Gainesville, GA  
7-9am I 4-6pm

File Name : 40240001  
Site Code : 40240001  
Start Date : 3/30/2017  
Page No : 3

|                                                            | Thompson Bridge Rd Northbound |      |       |      |            | Thompson Bridge Rd Southbound |      |       |      |            | Walmart Drwy Eastbound |      |       |      |            | Taco Bell Drwy Westbound |      |       |      |            |            |
|------------------------------------------------------------|-------------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|------------------------|------|-------|------|------------|--------------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                          | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Left                   | Thru | Right | Peds | App. Total | Left                     | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                               |      |       |      |            |                               |      |       |      |            |                        |      |       |      |            |                          |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 04:45 PM       |                               |      |       |      |            |                               |      |       |      |            |                        |      |       |      |            |                          |      |       |      |            |            |
| 04:45 PM                                                   | 19                            | 465  | 5     | 0    | 489        | 21                            | 0    | 275   |      |            | 18                     | 2    | 16    | 0    | 36         | 3                        | 1    | 5     | 0    | 9          | 809        |
| 05:00 PM                                                   | 17                            | 524  | 9     | 0    | 550        | 3                             | 278  | 16    | 0    | 297        | 22                     | 0    | 12    | 0    | 34         | 7                        | 1    | 12    | 0    | 20         | 901        |
| 05:15 PM                                                   | 10                            | 508  | 4     | 0    | 522        | 5                             | 290  | 10    | 0    | 305        | 26                     | 0    | 8     | 0    | 34         | 4                        | 0    | 6     | 0    | 10         | 871        |
| 05:30 PM                                                   | 11                            | 476  | 2     | 0    | 489        | 2                             | 282  | 7     | 0    | 291        | 5                      | 1    | 1     | 0    | 7          | 0                        | 0    | 2     | 0    | 2          | 789        |
| Total Volume                                               | 57                            | 1973 | 20    | 0    | 2050       | 13                            | 1101 | 54    | 0    | 1168       | 71                     | 3    | 37    | 0    | 111        | 14                       | 2    | 25    | 0    | 41         | 3370       |
| % App. Total                                               | 2.8                           | 96.2 | 1     | 0    |            | 1.1                           | 94.3 | 4.6   | 0    |            | 64                     | 2.7  | 33.3  | 0    |            | 34.1                     | 4.9  | 61    | 0    |            |            |
| PHF                                                        | .750                          | .941 | .556  | .000 | .932       | .650                          | .949 | .643  | .000 | .957       | .683                   | .375 | .578  | .000 | .771       | .500                     | .500 | .521  | .000 | .513       | .935       |



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TMC Data  
Thompson Bridge Rd @ Enota Ave  
Gainesville, GA  
7-9am I 4-6pm

File Name : 39980001  
Site Code : 39980001  
Start Date : 2/16/2017  
Page No : 1

## Groups Printed- Cars, Buses and Trucks

|               | Thompson Bridge Rd Northbound |      |       |      |            | Thompson Bridge Rd Southbound |      |       |      |            | Enota Ave Eastbound |      |       |      |            | Enota Ave Westbound |      |       |      |            |            |
|---------------|-------------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|---------------------|------|-------|------|------------|---------------------|------|-------|------|------------|------------|
| Start Time    | Left                          | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Left                | Thru | Right | Peds | App. Total | Left                | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 2                             | 125  | 4     | 0    | 131        | 51                            | 281  | 2     | 0    | 334        | 6                   | 7    | 6     | 0    | 19         | 4                   | 0    | 28    | 0    | 32         | 516        |
| 07:15 AM      | 0                             | 163  | 7     | 0    | 170        | 71                            | 372  | 4     | 0    | 447        | 8                   | 17   | 4     | 0    | 29         | 7                   | 6    | 33    | 0    | 46         | 692        |
| 07:30 AM      | 6                             | 177  | 7     | 0    | 190        | 83                            | 414  | 9     | 0    | 506        | 13                  | 12   | 6     | 0    | 31         | 18                  | 7    | 34    | 0    | 59         | 786        |
| 07:45 AM      | 3                             | 193  | 3     | 0    | 199        | 78                            | 455  | 8     | 0    | 541        | 16                  | 10   | 9     | 0    | 35         | 5                   | 3    | 47    | 0    | 55         | 830        |
| Total         | 11                            | 658  | 21    | 0    | 690        | 283                           | 1522 | 23    | 0    | 1828       | 43                  | 46   | 25    | 0    | 114        | 34                  | 16   | 142   | 0    | 192        | 2824       |
| 08:00 AM      | 6                             | 194  | 7     | 0    | 207        | 72                            | 367  | 9     | 0    | 448        | 12                  | 17   | 6     | 0    | 35         | 14                  | 6    | 38    | 0    | 58         | 748        |
| 08:15 AM      | 2                             | 170  | 9     | 0    | 181        | 80                            | 368  | 6     | 0    | 454        | 12                  | 12   | 8     | 0    | 32         | 8                   | 11   | 48    | 0    | 67         | 734        |
| 08:30 AM      | 6                             | 189  | 6     | 0    | 201        | 58                            | 339  | 3     | 0    | 400        | 12                  | 7    | 8     | 0    | 27         | 14                  | 6    | 37    | 0    | 57         | 685        |
| 08:45 AM      | 4                             | 174  | 3     | 0    | 181        | 56                            | 299  | 5     | 0    | 360        | 12                  | 10   | 1     | 0    | 23         | 10                  | 6    | 29    | 0    | 45         | 609        |
| Total         | 18                            | 727  | 25    | 0    | 770        | 266                           | 1373 | 23    | 0    | 1662       | 48                  | 46   | 23    | 0    | 117        | 46                  | 29   | 152   | 0    | 227        | 2776       |
| *** BREAK *** |                               |      |       |      |            |                               |      |       |      |            |                     |      |       |      |            |                     |      |       |      |            |            |
| 04:00 PM      | 4                             | 284  | 8     | 0    | 296        | 58                            | 219  | 6     | 0    | 283        | 42                  | 18   | 7     | 0    | 67         | 10                  | 19   | 75    | 0    | 104        | 750        |
| 04:15 PM      | 5                             | 320  | 18    | 0    | 343        | 47                            | 241  | 4     | 0    | 292        | 33                  | 17   | 5     | 0    | 55         | 14                  | 9    | 80    | 0    | 103        | 793        |
| 04:30 PM      | 3                             | 350  | 9     | 0    | 362        | 52                            | 220  | 8     | 0    | 280        | 17                  | 21   | 1     | 0    | 39         | 8                   | 10   | 84    | 0    | 102        | 783        |
| 04:45 PM      | 2                             | 372  | 9     | 0    | 383        | 45                            | 218  | 5     | 0    | 268        | 34                  | 24   | 2     | 0    | 60         | 14                  | 17   | 92    | 0    | 123        | 834        |
| Total         | 14                            | 1326 | 44    | 0    | 1384       | 202                           | 898  | 23    | 0    | 1123       | 126                 | 80   | 15    | 0    | 221        | 46                  | 55   | 331   | 0    | 432        | 3160       |
| 05:00 PM      | 6                             | 419  | 14    | 0    | 439        | 47                            | 227  | 9     | 0    | 283        | 38                  | 13   | 4     | 0    | 55         | 14                  | 10   | 66    | 0    | 90         | 867        |
| 05:15 PM      | 3                             | 401  | 3     | 0    | 407        | 65                            | 252  | 4     | 0    | 321        | 50                  | 23   | 3     | 0    | 76         | 13                  | 14   | 102   | 0    | 129        | 933        |
| 05:30 PM      | 6                             | 381  | 10    | 0    | 397        | 58                            | 245  | 8     | 0    | 311        | 39                  | 22   | 4     | 0    | 65         | 14                  | 10   | 99    | 0    | 123        | 896        |
| 05:45 PM      | 5                             | 339  | 15    | 0    | 359        | 47                            | 262  | 7     | 0    | 316        | 32                  | 19   | 3     | 0    | 54         | 11                  | 13   | 78    | 0    | 102        | 831        |
| Total         | 20                            | 1540 | 42    | 0    | 1602       | 217                           | 986  | 28    | 0    | 1231       | 159                 | 77   | 14    | 0    | 250        | 52                  | 47   | 345   | 0    | 444        | 3527       |
| Grand Total   | 63                            | 4251 | 132   | 0    | 4446       | 968                           | 4779 | 97    | 0    | 5844       | 376                 | 249  | 77    | 0    | 702        | 178                 | 147  | 970   | 0    | 1295       | 12287      |
| Apprch %      | 1.4                           | 95.6 | 3     | 0    |            | 16.6                          | 81.8 | 1.7   | 0    |            | 53.6                | 35.5 | 11    | 0    |            | 13.7                | 11.4 | 74.9  | 0    |            |            |
| Total %       | 0.5                           | 34.6 | 1.1   | 0    | 36.2       | 7.9                           | 38.9 | 0.8   | 0    | 47.6       | 3.1                 | 2    | 0.6   | 0    | 5.7        | 1.4                 | 1.2  | 7.9   | 0    | 10.5       |            |

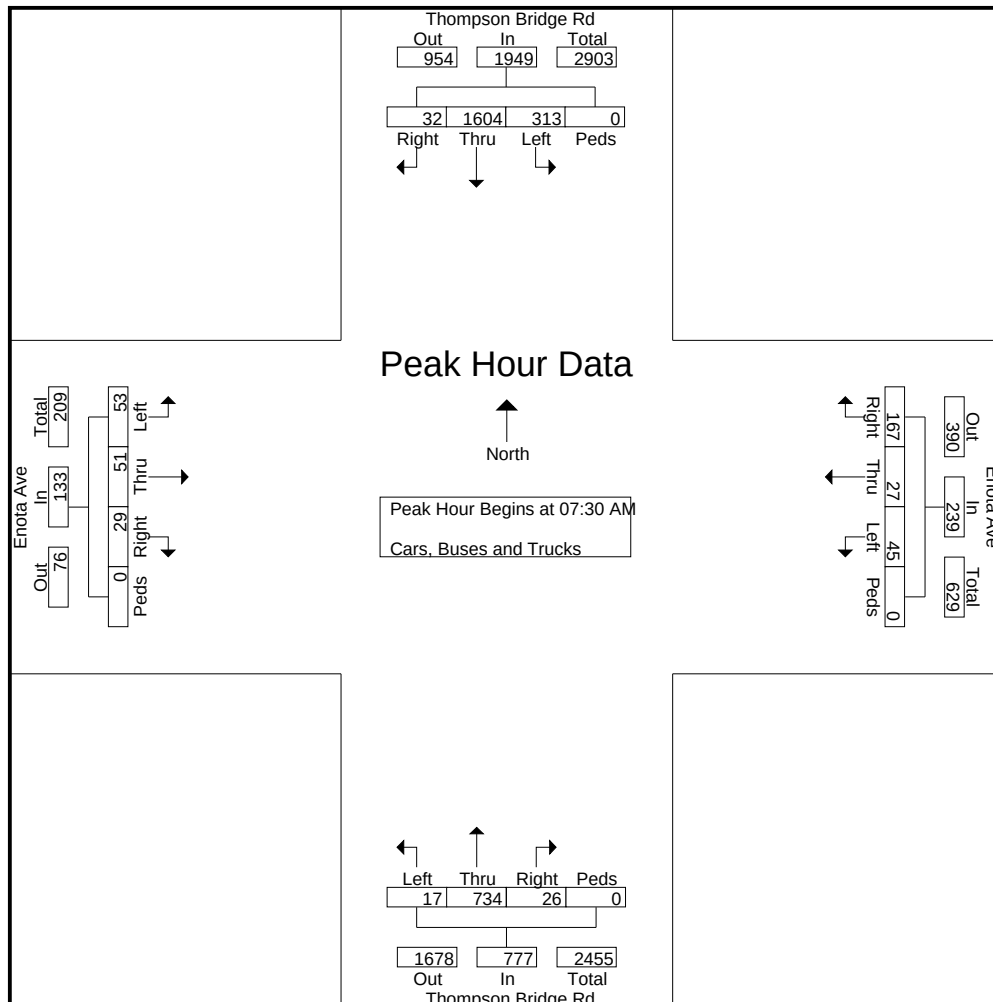
# Reliable Traffic Data Services, LLC

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info@reliabletraffic.org | www.reliabletraffic.org

TMC Data  
Thompson Bridge Rd @ Enota Ave  
Gainesville, GA  
7-9am I 4-6pm

File Name : 39980001  
Site Code : 39980001  
Start Date : 2/16/2017  
Page No : 2

|                                                            | Thompson Bridge Rd Northbound |      |       |      |            | Thompson Bridge Rd Southbound |      |       |      |            | Enota Ave Eastbound |      |       |      |            | Enota Ave Westbound |      |       |      |            |            |
|------------------------------------------------------------|-------------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|---------------------|------|-------|------|------------|---------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                          | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Left                | Thru | Right | Peds | App. Total | Left                | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                               |      |       |      |            |                               |      |       |      |            |                     |      |       |      |            |                     |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                               |      |       |      |            |                               |      |       |      |            |                     |      |       |      |            |                     |      |       |      |            |            |
| 07:30 AM                                                   | 6                             | 177  | 7     | 0    | 190        | 83                            | 414  | 9     | 0    | 506        | 13                  | 12   | 6     | 0    | 31         | 18                  | 7    | 34    | 0    | 59         | 786        |
| 07:45 AM                                                   | 3                             | 193  | 3     | 0    | 199        | 78                            | 455  | 8     | 0    | 541        | 16                  | 10   | 9     | 0    | 35         | 5                   | 3    | 47    | 0    | 55         | 830        |
| 08:00 AM                                                   | 6                             | 194  | 7     | 0    | 207        | 72                            | 367  | 9     | 0    | 448        | 12                  | 17   | 6     | 0    | 35         | 14                  | 6    | 38    | 0    | 58         | 748        |
| 08:15 AM                                                   | 2                             | 170  | 9     | 0    | 181        | 80                            | 368  | 6     | 0    | 454        | 12                  | 12   | 8     | 0    | 32         | 8                   | 11   | 48    | 0    | 67         | 734        |
| Total Volume                                               | 17                            | 734  | 26    | 0    | 777        | 313                           | 1604 | 32    | 0    | 1949       | 53                  | 51   | 29    | 0    | 133        | 45                  | 27   | 167   | 0    | 239        | 3098       |
| % App. Total                                               | 2.2                           | 94.5 | 3.3   | 0    |            | 16.1                          | 82.3 | 1.6   | 0    |            | 39.8                | 38.3 | 21.8  | 0    |            | 18.8                | 11.3 | 69.9  | 0    |            |            |
| PHF                                                        | .708                          | .946 | .722  | .000 | .938       | .943                          | .881 | .889  | .000 | .901       | .828                | .750 | .806  | .000 | .950       | .625                | .614 | .870  | .000 | .892       | .933       |



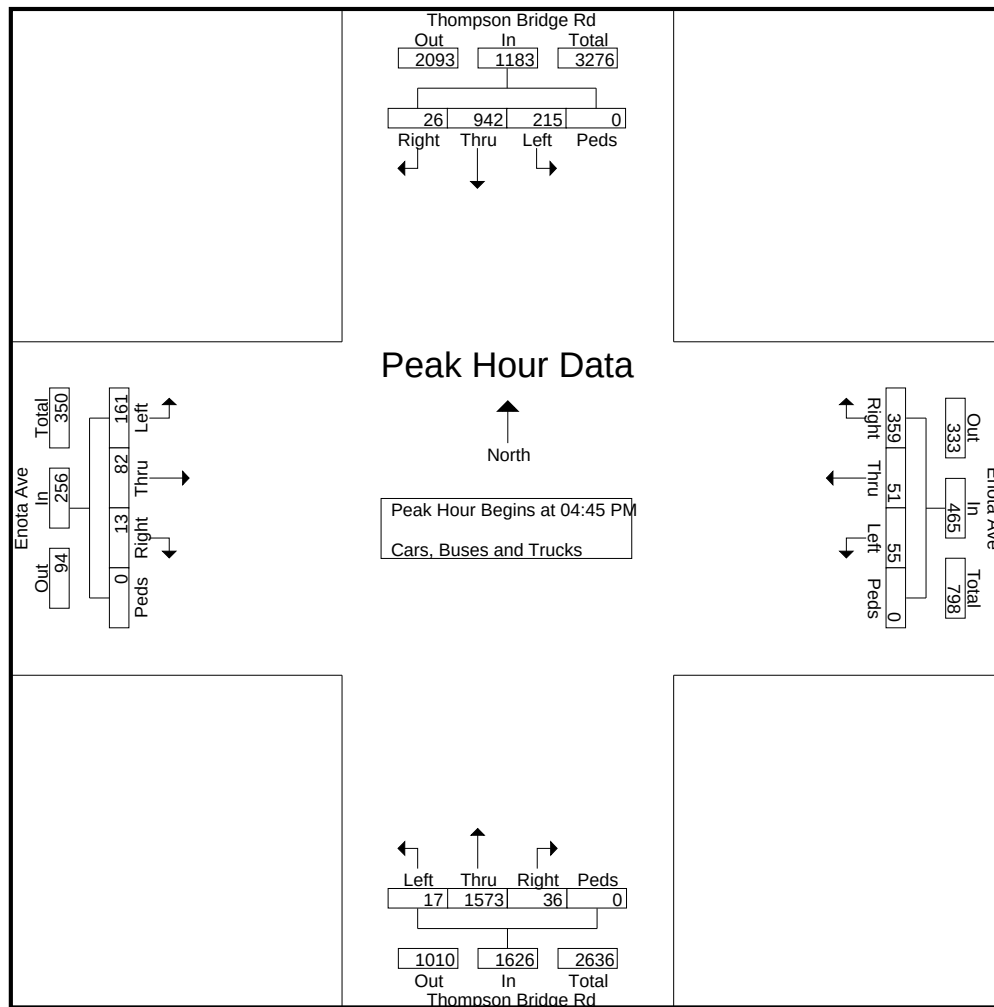
# Reliable Traffic Data Services, LLC

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TMC Data  
Thompson Bridge Rd @ Enota Ave  
Gainesville, GA  
7-9am I 4-6pm

File Name : 39980001  
Site Code : 39980001  
Start Date : 2/16/2017  
Page No : 3

|                                                            | Thompson Bridge Rd Northbound |      |       |      |            | Thompson Bridge Rd Southbound |      |       |      |            | Enota Ave Eastbound |      |       |      |            | Enota Ave Westbound |      |       |      |            |            |
|------------------------------------------------------------|-------------------------------|------|-------|------|------------|-------------------------------|------|-------|------|------------|---------------------|------|-------|------|------------|---------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                          | Thru | Right | Peds | App. Total | Left                          | Thru | Right | Peds | App. Total | Left                | Thru | Right | Peds | App. Total | Left                | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                               |      |       |      |            |                               |      |       |      |            |                     |      |       |      |            |                     |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 04:45 PM       |                               |      |       |      |            |                               |      |       |      |            |                     |      |       |      |            |                     |      |       |      |            |            |
| 04:45 PM                                                   | 2                             | 372  | 9     | 0    | 383        | 45                            | 218  | 5     | 0    | 268        | 34                  | 24   | 2     | 0    | 60         | 14                  | 17   | 92    | 0    | 123        | 834        |
| 05:00 PM                                                   | 6                             | 419  | 14    | 0    | 439        | 47                            | 227  | 9     | 0    | 283        | 38                  | 13   | 4     | 0    | 55         | 14                  | 10   | 66    | 0    | 90         | 867        |
| 05:15 PM                                                   | 3                             | 401  | 3     | 0    | 407        | 65                            | 252  | 4     | 0    | 321        | 50                  | 23   | 3     | 0    | 76         | 13                  | 14   | 102   | 0    | 129        | 933        |
| 05:30 PM                                                   | 6                             | 381  | 10    | 0    | 397        | 58                            | 245  | 8     | 0    | 311        | 39                  | 22   | 4     | 0    | 65         | 14                  | 10   | 99    | 0    | 123        | 896        |
| Total Volume                                               | 17                            | 1573 | 36    | 0    | 1626       | 215                           | 942  | 26    | 0    | 1183       | 161                 | 82   | 13    | 0    | 256        | 55                  | 51   | 359   | 0    | 465        | 3530       |
| % App. Total                                               | 1                             | 96.7 | 2.2   | 0    |            | 18.2                          | 79.6 | 2.2   | 0    |            | 62.9                | 32   | 5.1   | 0    |            | 11.8                | 11   | 77.2  | 0    |            |            |
| PHF                                                        | .708                          | .939 | .643  | .000 | .926       | .827                          | .935 | .722  | .000 | .921       | .805                | .854 | .813  | .000 | .842       | .982                | .750 | .880  | .000 | .901       | .946       |



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TMC Data  
Enota Ave @ Riverside Dr  
Gainesville, GA  
7-9am I 4-6pm

File Name : 40240002  
Site Code : 40240002  
Start Date : 3/30/2017  
Page No : 1

## Groups Printed- Cars, Buses and Trucks

|               | Riverside Dr Northbound |      |       |      |            | Riverside Dr Southbound |      |       |      |            | Enota Ave Eastbound |      |       |      |            | Enota Ave Westbound |      |       |      |            |            |
|---------------|-------------------------|------|-------|------|------------|-------------------------|------|-------|------|------------|---------------------|------|-------|------|------------|---------------------|------|-------|------|------------|------------|
| Start Time    | Left                    | Thru | Right | Peds | App. Total | Left                    | Thru | Right | Peds | App. Total | Left                | Thru | Right | Peds | App. Total | Left                | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 2                       | 9    | 14    | 0    | 25         | 18                      | 11   | 0     | 0    | 29         | 4                   | 62   | 0     | 0    | 66         | 9                   | 30   | 6     | 0    | 45         | 165        |
| 07:15 AM      | 3                       | 16   | 35    | 0    | 54         | 33                      | 25   | 1     | 0    | 59         | 1                   | 82   | 0     | 0    | 83         | 6                   | 45   | 5     | 0    | 56         | 252        |
| 07:30 AM      | 1                       | 21   | 19    | 0    | 41         | 37                      | 32   | 7     | 0    | 76         | 1                   | 67   | 5     | 0    | 73         | 23                  | 62   | 10    | 0    | 95         | 285        |
| 07:45 AM      | 1                       | 13   | 7     | 0    | 21         | 39                      | 40   | 3     | 0    | 82         | 6                   | 81   | 0     | 0    | 87         | 5                   | 52   | 11    | 0    | 68         | 258        |
| Total         | 7                       | 59   | 75    | 0    | 141        | 127                     | 108  | 11    | 0    | 246        | 12                  | 292  | 5     | 0    | 309        | 43                  | 189  | 32    | 0    | 264        | 960        |
| 08:00 AM      | 4                       | 5    | 4     | 0    | 13         | 28                      | 25   | 5     | 0    | 58         | 1                   | 75   | 2     | 0    | 78         | 11                  | 41   | 14    | 0    | 66         | 215        |
| 08:15 AM      | 5                       | 9    | 3     | 0    | 17         | 14                      | 13   | 3     | 0    | 30         | 2                   | 72   | 3     | 0    | 77         | 7                   | 55   | 13    | 0    | 75         | 199        |
| 08:30 AM      | 2                       | 8    | 1     | 0    | 11         | 12                      | 15   | 4     | 0    | 31         | 1                   | 68   | 1     | 0    | 70         | 3                   | 47   | 7     | 0    | 57         | 169        |
| 08:45 AM      | 1                       | 12   | 4     | 0    | 17         | 19                      | 14   | 5     | 0    | 38         | 2                   | 57   | 3     | 0    | 62         | 9                   | 52   | 7     | 0    | 68         | 185        |
| Total         | 12                      | 34   | 12    | 0    | 58         | 73                      | 67   | 17    | 0    | 157        | 6                   | 272  | 9     | 0    | 287        | 30                  | 195  | 41    | 0    | 266        | 768        |
| *** BREAK *** |                         |      |       |      |            |                         |      |       |      |            |                     |      |       |      |            |                     |      |       |      |            |            |
| 04:00 PM      | 7                       | 25   | 4     | 0    | 36         | 10                      | 20   | 3     | 0    | 33         | 5                   | 64   | 3     | 0    | 72         | 6                   | 83   | 19    | 0    | 108        | 249        |
| 04:15 PM      | 8                       | 42   | 9     | 0    | 59         | 16                      | 20   | 4     | 0    | 40         | 14                  | 70   | 0     | 0    | 84         | 5                   | 80   | 15    | 0    | 100        | 283        |
| 04:30 PM      | 9                       | 70   | 11    | 0    | 90         | 20                      | 34   | 3     | 0    | 57         | 12                  | 62   | 2     | 0    | 76         | 5                   | 74   | 25    | 0    | 104        | 327        |
| 04:45 PM      | 8                       | 91   | 7     | 0    | 106        | 11                      | 16   | 7     | 0    | 34         | 18                  | 66   | 2     | 0    | 86         | 3                   | 84   | 25    | 0    | 112        | 338        |
| Total         | 32                      | 228  | 31    | 0    | 291        | 57                      | 90   | 17    | 0    | 164        | 49                  | 262  | 7     | 0    | 318        | 19                  | 321  | 84    | 0    | 424        | 1197       |
| 05:00 PM      | 6                       | 80   | 8     | 0    | 94         | 16                      | 17   | 12    | 0    | 45         | 16                  | 82   | 3     | 0    | 101        | 2                   | 73   | 31    | 0    | 106        | 346        |
| 05:15 PM      | 5                       | 89   | 10    | 0    | 104        | 14                      | 13   | 1     | 0    | 28         | 16                  | 87   | 2     | 0    | 105        | 3                   | 75   | 30    | 0    | 108        | 345        |
| 05:30 PM      | 3                       | 82   | 12    | 0    | 97         | 18                      | 20   | 9     | 0    | 47         | 17                  | 71   | 3     | 0    | 91         | 18                  | 80   | 23    | 0    | 121        | 356        |
| 05:45 PM      | 8                       | 50   | 16    | 0    | 74         | 10                      | 23   | 1     | 0    | 34         | 8                   | 69   | 4     | 0    | 81         | 4                   | 84   | 20    | 0    | 108        | 297        |
| Total         | 22                      | 301  | 46    | 0    | 369        | 58                      | 73   | 23    | 0    | 154        | 57                  | 309  | 12    | 0    | 378        | 27                  | 312  | 104   | 0    | 443        | 1344       |
| Grand Total   | 73                      | 622  | 164   | 0    | 859        | 315                     | 338  | 68    | 0    | 721        | 124                 | 1135 | 33    | 0    | 1292       | 119                 | 1017 | 261   | 0    | 1397       | 4269       |
| Apprch %      | 8.5                     | 72.4 | 19.1  | 0    |            | 43.7                    | 46.9 | 9.4   | 0    |            | 9.6                 | 87.8 | 2.6   | 0    |            | 8.5                 | 72.8 | 18.7  | 0    |            |            |
| Total %       | 1.7                     | 14.6 | 3.8   | 0    | 20.1       | 7.4                     | 7.9  | 1.6   | 0    | 16.9       | 2.9                 | 26.6 | 0.8   | 0    | 30.3       | 2.8                 | 23.8 | 6.1   | 0    | 32.7       |            |

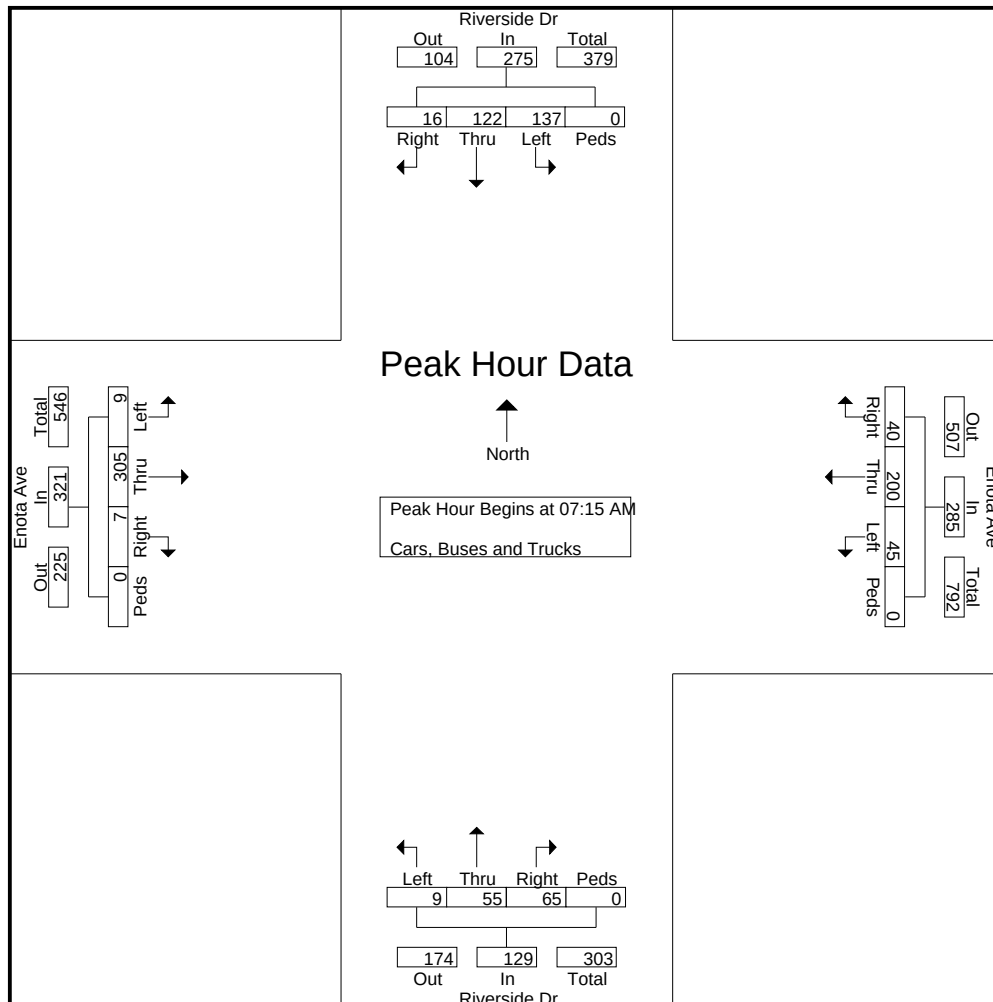
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TMC Data  
Enota Ave @ Riverside Dr  
Gainesville, GA  
7-9am I 4-6pm

File Name : 40240002  
Site Code : 40240002  
Start Date : 3/30/2017  
Page No : 2

|                                                            | Riverside Dr Northbound |      |       |      |            | Riverside Dr Southbound |      |       |      |            | Enota Ave Eastbound |      |       |      |            | Enota Ave Westbound |      |       |      |            |            |
|------------------------------------------------------------|-------------------------|------|-------|------|------------|-------------------------|------|-------|------|------------|---------------------|------|-------|------|------------|---------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                    | Thru | Right | Peds | App. Total | Left                    | Thru | Right | Peds | App. Total | Left                | Thru | Right | Peds | App. Total | Left                | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                         |      |       |      |            |                         |      |       |      |            |                     |      |       |      |            |                     |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:15 AM       |                         |      |       |      |            |                         |      |       |      |            |                     |      |       |      |            |                     |      |       |      |            |            |
| 07:15 AM                                                   | 3                       | 16   | 35    | 0    | 54         | 33                      | 25   | 1     | 0    | 59         | 1                   | 82   | 0     | 0    | 83         | 6                   | 45   | 5     | 0    | 56         | 252        |
| 07:30 AM                                                   | 1                       | 21   | 19    | 0    | 41         | 37                      | 32   | 7     | 0    | 76         | 1                   | 67   | 5     | 0    | 73         | 23                  | 62   | 10    | 0    | 95         | 285        |
| 07:45 AM                                                   | 1                       | 13   | 7     | 0    | 21         | 39                      | 40   | 3     | 0    | 82         | 6                   | 81   | 0     | 0    | 87         | 5                   | 52   | 11    | 0    | 68         | 258        |
| 08:00 AM                                                   | 4                       | 5    | 4     | 0    | 13         | 28                      | 25   | 5     | 0    | 58         | 1                   | 75   | 2     | 0    | 78         | 11                  | 41   | 14    | 0    | 66         | 215        |
| Total Volume                                               | 9                       | 55   | 65    | 0    | 129        | 137                     | 122  | 16    | 0    | 275        | 9                   | 305  | 7     | 0    | 321        | 45                  | 200  | 40    | 0    | 285        | 1010       |
| % App. Total                                               | 7                       | 42.6 | 50.4  | 0    |            | 49.8                    | 44.4 | 5.8   | 0    |            | 2.8                 | 95   | 2.2   | 0    |            | 15.8                | 70.2 | 14    | 0    |            |            |
| PHF                                                        | .563                    | .655 | .464  | .000 | .597       | .878                    | .763 | .571  | .000 | .838       | .375                | .930 | .350  | .000 | .922       | .489                | .806 | .714  | .000 | .750       | .886       |



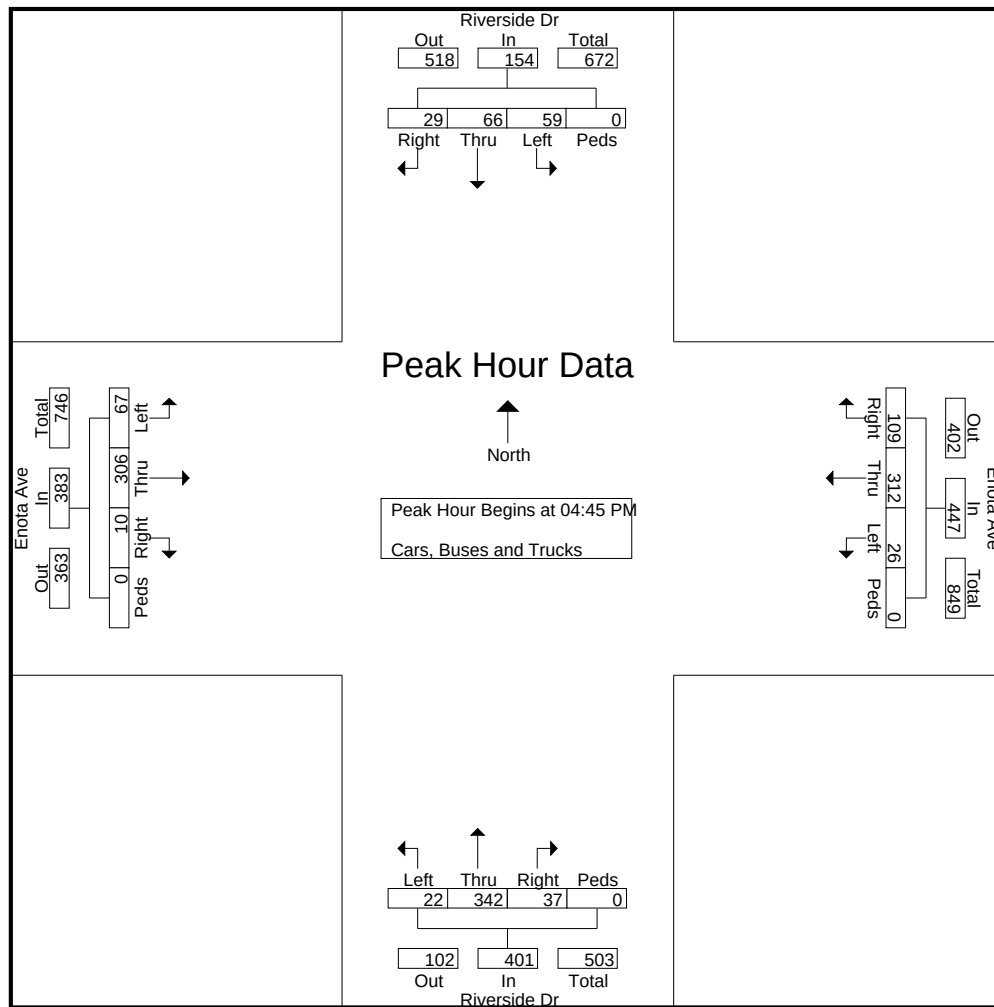
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TMC Data  
Enota Ave @ Riverside Dr  
Gainesville, GA  
7-9am I 4-6pm

File Name : 40240002  
Site Code : 40240002  
Start Date : 3/30/2017  
Page No : 3

|                                                            | Riverside Dr Northbound |      |       |      |            | Riverside Dr Southbound |      |       |      |            | Enota Ave Eastbound |      |       |      |            | Enota Ave Westbound |      |       |      |            |            |
|------------------------------------------------------------|-------------------------|------|-------|------|------------|-------------------------|------|-------|------|------------|---------------------|------|-------|------|------------|---------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                    | Thru | Right | Peds | App. Total | Left                    | Thru | Right | Peds | App. Total | Left                | Thru | Right | Peds | App. Total | Left                | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                         |      |       |      |            |                         |      |       |      |            |                     |      |       |      |            |                     |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 04:45 PM       |                         |      |       |      |            |                         |      |       |      |            |                     |      |       |      |            |                     |      |       |      |            |            |
| 04:45 PM                                                   | 8                       | 91   | 7     | 0    | 106        | 11                      | 16   | 7     | 0    | 34         | 18                  | 66   | 2     | 0    | 86         | 3                   | 84   | 25    | 0    | 112        | 338        |
| 05:00 PM                                                   | 6                       | 80   | 8     | 0    | 94         | 16                      | 17   | 12    | 0    | 45         | 16                  | 82   | 3     | 0    | 101        | 2                   | 73   | 31    | 0    | 106        | 346        |
| 05:15 PM                                                   | 5                       | 89   | 10    | 0    | 104        | 14                      | 13   | 1     | 0    | 28         | 16                  | 87   | 2     | 0    | 105        | 3                   | 75   | 30    | 0    | 108        | 345        |
| 05:30 PM                                                   | 3                       | 82   | 12    | 0    | 97         | 18                      | 20   | 9     | 0    | 47         | 17                  | 71   | 3     | 0    | 91         | 18                  | 80   | 23    | 0    | 121        | 356        |
| Total Volume                                               | 22                      | 342  | 37    | 0    | 401        | 59                      | 66   | 29    | 0    | 154        | 67                  | 306  | 10    | 0    | 383        | 26                  | 312  | 109   | 0    | 447        | 1385       |
| % App. Total                                               | 5.5                     | 85.3 | 9.2   | 0    |            | 38.3                    | 42.9 | 18.8  | 0    |            | 17.5                | 79.9 | 2.6   | 0    |            | 5.8                 | 69.8 | 24.4  | 0    |            |            |
| PHF                                                        | .688                    | .940 | .771  | .000 | .946       | .819                    | .825 | .604  | .000 | .819       | .931                | .879 | .833  | .000 | .912       | .361                | .929 | .879  | .000 | .924       | .973       |





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TMC Data  
SR11 Bus @ S Enota Dr  
Gainesville, GA  
7-9am I 4-6pm

File Name : 40240003  
Site Code : 40240003  
Start Date : 3/30/2017  
Page No : 1

## Groups Printed- Cars, Buses and Trucks

|               | SR11 Bus Northbound |      |       |      |            | SR11 Bus Southbound |      |       |      |            | S Enota Dr Eastbound |      |       |      |            | S Enota Dr Westbound |      |       |      |            |            |
|---------------|---------------------|------|-------|------|------------|---------------------|------|-------|------|------------|----------------------|------|-------|------|------------|----------------------|------|-------|------|------------|------------|
| Start Time    | Left                | Thru | Right | Peds | App. Total | Left                | Thru | Right | Peds | App. Total | Left                 | Thru | Right | Peds | App. Total | Left                 | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM      | 0                   | 52   | 16    | 0    | 68         | 39                  | 122  | 36    | 0    | 197        | 35                   | 40   | 10    | 0    | 85         | 10                   | 20   | 7     | 0    | 37         | 387        |
| 07:15 AM      | 8                   | 69   | 32    | 0    | 109        | 51                  | 180  | 45    | 0    | 276        | 50                   | 59   | 16    | 0    | 125        | 16                   | 38   | 32    | 0    | 86         | 596        |
| 07:30 AM      | 6                   | 90   | 30    | 0    | 126        | 67                  | 181  | 49    | 0    | 297        | 80                   | 70   | 26    | 0    | 176        | 17                   | 44   | 23    | 0    | 84         | 683        |
| 07:45 AM      | 2                   | 122  | 32    | 0    | 156        | 62                  | 210  | 40    | 0    | 312        | 76                   | 75   | 5     | 0    | 156        | 16                   | 29   | 23    | 0    | 68         | 692        |
| Total         | 16                  | 333  | 110   | 0    | 459        | 219                 | 693  | 170   | 0    | 1082       | 241                  | 244  | 57    | 0    | 542        | 59                   | 131  | 85    | 0    | 275        | 2358       |
| 08:00 AM      | 2                   | 123  | 29    | 0    | 154        | 52                  | 226  | 38    | 0    | 316        | 65                   | 54   | 2     | 0    | 121        | 23                   | 19   | 20    | 0    | 62         | 653        |
| 08:15 AM      | 2                   | 113  | 23    | 0    | 138        | 64                  | 235  | 44    | 0    | 343        | 51                   | 55   | 1     | 0    | 107        | 25                   | 35   | 20    | 0    | 80         | 668        |
| 08:30 AM      | 3                   | 91   | 21    | 0    | 115        | 49                  | 160  | 34    | 0    | 243        | 36                   | 50   | 0     | 0    | 86         | 10                   | 22   | 29    | 0    | 61         | 505        |
| 08:45 AM      | 2                   | 75   | 21    | 0    | 98         | 42                  | 125  | 23    | 0    | 190        | 33                   | 41   | 1     | 0    | 75         | 16                   | 29   | 11    | 0    | 56         | 419        |
| Total         | 9                   | 402  | 94    | 0    | 505        | 207                 | 746  | 139   | 0    | 1092       | 185                  | 200  | 4     | 0    | 389        | 74                   | 105  | 80    | 0    | 259        | 2245       |
| *** BREAK *** |                     |      |       |      |            |                     |      |       |      |            |                      |      |       |      |            |                      |      |       |      |            |            |
| 04:00 PM      | 2                   | 147  | 11    | 0    | 160        | 30                  | 143  | 54    | 0    | 227        | 55                   | 25   | 3     | 0    | 83         | 31                   | 50   | 62    | 0    | 143        | 613        |
| 04:15 PM      | 1                   | 168  | 15    | 0    | 184        | 24                  | 199  | 42    | 0    | 265        | 66                   | 28   | 5     | 0    | 99         | 39                   | 59   | 75    | 0    | 173        | 721        |
| 04:30 PM      | 3                   | 154  | 4     | 0    | 161        | 20                  | 148  | 64    | 0    | 232        | 50                   | 37   | 4     | 0    | 91         | 47                   | 66   | 74    | 0    | 187        | 671        |
| 04:45 PM      | 1                   | 142  | 21    | 0    | 164        | 28                  | 168  | 68    | 0    | 264        | 51                   | 37   | 6     | 0    | 94         | 33                   | 70   | 89    | 0    | 192        | 714        |
| Total         | 7                   | 611  | 51    | 0    | 669        | 102                 | 658  | 228   | 0    | 988        | 222                  | 127  | 18    | 0    | 367        | 150                  | 245  | 300   | 0    | 695        | 2719       |
| 05:00 PM      | 8                   | 146  | 11    | 0    | 165        | 25                  | 126  | 81    | 0    | 232        | 51                   | 25   | 4     | 0    | 80         | 71                   | 84   | 109   | 0    | 264        | 741        |
| 05:15 PM      | 5                   | 132  | 5     | 0    | 142        | 26                  | 133  | 50    | 0    | 209        | 58                   | 33   | 10    | 0    | 101        | 84                   | 92   | 88    | 0    | 264        | 716        |
| 05:30 PM      | 3                   | 164  | 11    | 0    | 178        | 27                  | 152  | 51    | 0    | 230        | 71                   | 47   | 8     | 0    | 126        | 49                   | 95   | 68    | 0    | 212        | 746        |
| 05:45 PM      | 15                  | 141  | 10    | 0    | 166        | 29                  | 162  | 68    | 0    | 259        | 56                   | 24   | 8     | 0    | 88         | 27                   | 50   | 70    | 0    | 147        | 660        |
| Total         | 31                  | 583  | 37    | 0    | 651        | 107                 | 573  | 250   | 0    | 930        | 236                  | 129  | 30    | 0    | 395        | 231                  | 321  | 335   | 0    | 887        | 2863       |
| Grand Total   | 63                  | 1929 | 292   | 0    | 2284       | 635                 | 2670 | 787   | 0    | 4092       | 884                  | 700  | 109   | 0    | 1693       | 514                  | 802  | 800   | 0    | 2116       | 10185      |
| Apprch %      | 2.8                 | 84.5 | 12.8  | 0    |            | 15.5                | 65.2 | 19.2  | 0    |            | 52.2                 | 41.3 | 6.4   | 0    |            | 24.3                 | 37.9 | 37.8  | 0    |            |            |
| Total %       | 0.6                 | 18.9 | 2.9   | 0    | 22.4       | 6.2                 | 26.2 | 7.7   | 0    | 40.2       | 8.7                  | 6.9  | 1.1   | 0    | 16.6       | 5                    | 7.9  | 7.9   | 0    | 20.8       |            |

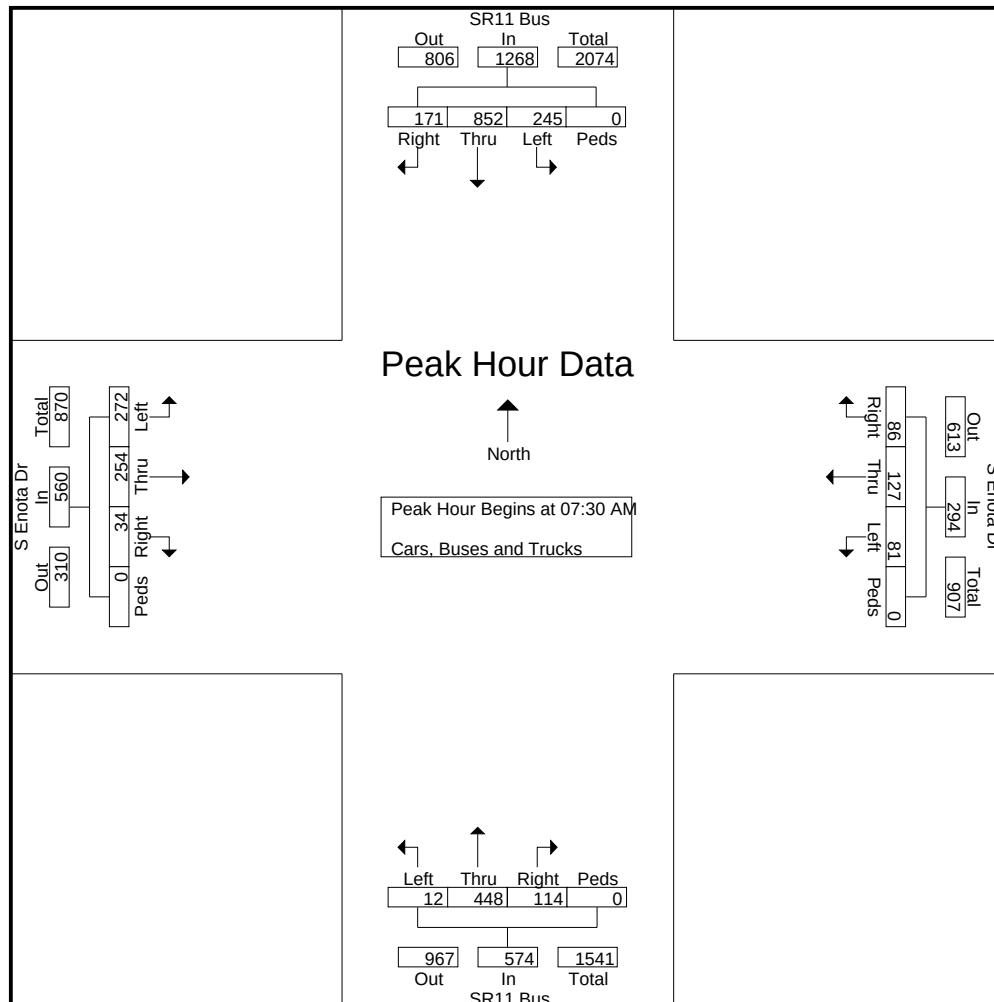
# Reliable Traffic Data Services, LLC

Tel: (770) 578-8158 | Fax: (770) 578-8159  
info@reliabletraffic.org | www.reliabletraffic.org

TMC Data  
SR11 Bus @ S Enota Dr  
Gainesville, GA  
7-9am I 4-6pm

File Name : 40240003  
Site Code : 40240003  
Start Date : 3/30/2017  
Page No : 2

|                                                            | SR11 Bus Northbound |      |       |      |            | SR11 Bus Southbound |      |       |      |            | S Enota Dr Eastbound |      |       |      |            | S Enota Dr Westbound |      |       |      |            |            |
|------------------------------------------------------------|---------------------|------|-------|------|------------|---------------------|------|-------|------|------------|----------------------|------|-------|------|------------|----------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                | Thru | Right | Peds | App. Total | Left                | Thru | Right | Peds | App. Total | Left                 | Thru | Right | Peds | App. Total | Left                 | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                     |      |       |      |            |                     |      |       |      |            |                      |      |       |      |            |                      |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                     |      |       |      |            |                     |      |       |      |            |                      |      |       |      |            |                      |      |       |      |            |            |
| 07:30 AM                                                   | 6                   | 90   | 30    | 0    | 126        | 67                  | 181  | 49    | 0    | 297        | 80                   | 70   | 26    | 0    | 176        | 17                   | 44   | 23    | 0    | 84         | 683        |
| 07:45 AM                                                   | 2                   | 122  | 32    | 0    | 156        | 62                  | 210  | 40    | 0    | 312        | 76                   | 75   | 5     | 0    | 156        | 16                   | 29   | 23    | 0    | 68         | 692        |
| 08:00 AM                                                   | 2                   | 123  | 29    | 0    | 154        | 52                  | 226  | 38    | 0    | 316        | 65                   | 54   | 2     | 0    | 121        | 23                   | 19   | 20    | 0    | 62         | 653        |
| 08:15 AM                                                   | 2                   | 113  | 23    | 0    | 138        | 64                  | 235  | 44    | 0    | 343        | 51                   | 55   | 1     | 0    | 107        | 25                   | 35   | 20    | 0    | 80         | 668        |
| Total Volume                                               | 12                  | 448  | 114   | 0    | 574        | 245                 | 852  | 171   | 0    | 1268       | 272                  | 254  | 34    | 0    | 560        | 81                   | 127  | 86    | 0    | 294        | 2696       |
| % App. Total                                               | 2.1                 | 78   | 19.9  | 0    |            | 19.3                | 67.2 | 13.5  | 0    |            | 48.6                 | 45.4 | 6.1   | 0    |            | 27.6                 | 43.2 | 29.3  | 0    |            |            |
| PHF                                                        | .500                | .911 | .891  | .000 | .920       | .914                | .906 | .872  | .000 | .924       | .850                 | .847 | .327  | .000 | .795       | .810                 | .722 | .935  | .000 | .875       | .974       |



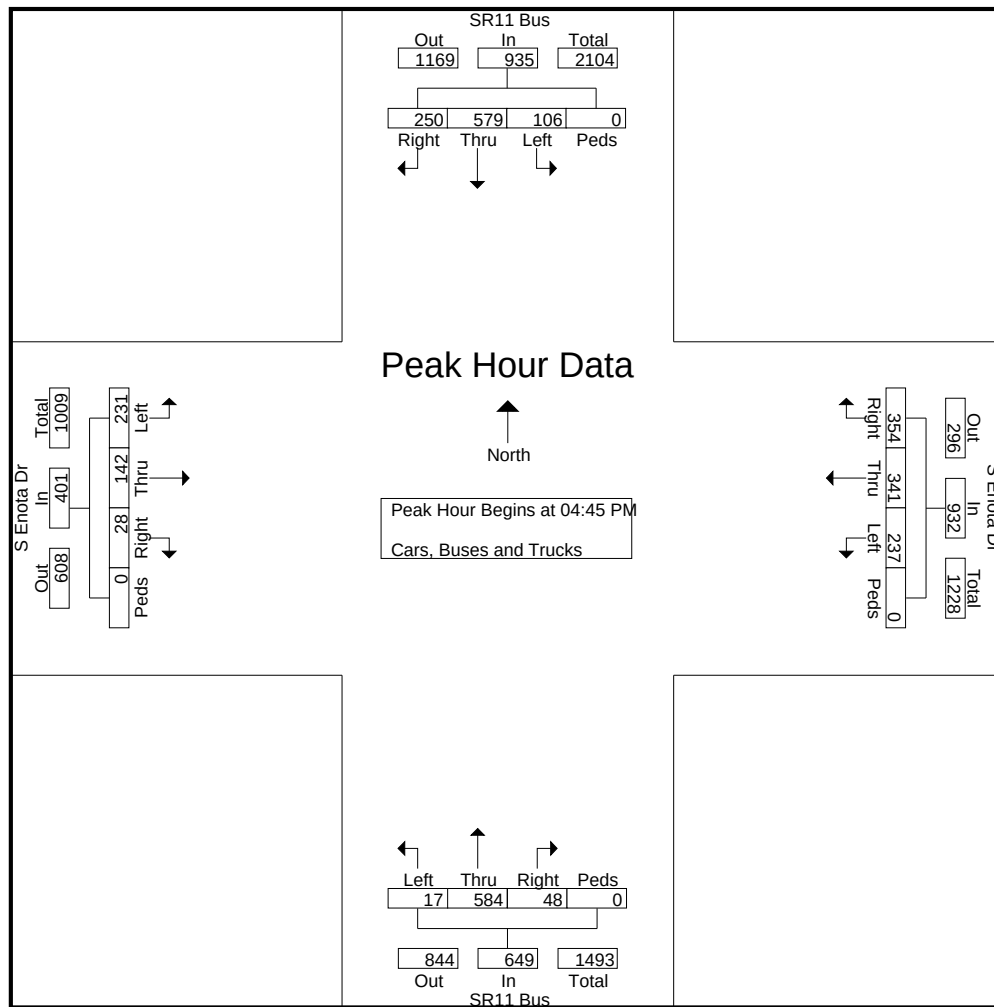
# Reliable Traffic Data Services, LLC

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info@reliabletraffic.org | www.reliabletraffic.org

TMC Data  
SR11 Bus @ S Enota Dr  
Gainesville, GA  
7-9am I 4-6pm

File Name : 40240003  
Site Code : 40240003  
Start Date : 3/30/2017  
Page No : 3

|                                                            | SR11 Bus Northbound |      |       |      |            | SR11 Bus Southbound |      |       |      |            | S Enota Dr Eastbound |      |       |      |            | S Enota Dr Westbound |      |       |      |            |            |
|------------------------------------------------------------|---------------------|------|-------|------|------------|---------------------|------|-------|------|------------|----------------------|------|-------|------|------------|----------------------|------|-------|------|------------|------------|
| Start Time                                                 | Left                | Thru | Right | Peds | App. Total | Left                | Thru | Right | Peds | App. Total | Left                 | Thru | Right | Peds | App. Total | Left                 | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                     |      |       |      |            |                     |      |       |      |            |                      |      |       |      |            |                      |      |       |      |            |            |
| Peak Hour for Entire Intersection Begins at 04:45 PM       |                     |      |       |      |            |                     |      |       |      |            |                      |      |       |      |            |                      |      |       |      |            |            |
| 04:45 PM                                                   | 1                   | 142  | 21    | 0    | 164        | 28                  | 168  | 68    | 0    | 264        | 51                   | 37   | 6     | 0    | 94         | 33                   | 70   | 89    | 0    | 192        | 714        |
| 05:00 PM                                                   | 8                   | 146  | 11    | 0    | 165        | 25                  | 126  | 81    | 0    | 232        | 51                   | 25   | 4     | 0    | 80         | 71                   | 84   | 109   | 0    | 264        | 741        |
| 05:15 PM                                                   | 5                   | 132  | 5     | 0    | 142        | 26                  | 133  | 50    | 0    | 209        | 58                   | 33   | 10    | 0    | 101        | 84                   | 92   | 88    | 0    | 264        | 716        |
| 05:30 PM                                                   | 3                   | 164  | 11    | 0    | 178        | 27                  | 152  | 51    | 0    | 230        | 71                   | 47   | 8     | 0    | 126        | 49                   | 95   | 68    | 0    | 212        | 746        |
| Total Volume                                               | 17                  | 584  | 48    | 0    | 649        | 106                 | 579  | 250   | 0    | 935        | 231                  | 142  | 28    | 0    | 401        | 237                  | 341  | 354   | 0    | 932        | 2917       |
| % App. Total                                               | 2.6                 | 90   | 7.4   | 0    |            | 11.3                | 61.9 | 26.7  | 0    |            | 57.6                 | 35.4 | 7     | 0    |            | 25.4                 | 36.6 | 38    | 0    |            |            |
| PHF                                                        | .531                | .890 | .571  | .000 | .912       | .946                | .862 | .772  | .000 | .885       | .813                 | .755 | .700  | .000 | .796       | .705                 | .897 | .812  | .000 | .883       | .978       |



# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-9124-004

Day: Wednesday

City: Gainesville

Date: 2/22/2017

| AM                          |                          |         |         |                          |         |         |           |         |         |           |         |         |              |
|-----------------------------|--------------------------|---------|---------|--------------------------|---------|---------|-----------|---------|---------|-----------|---------|---------|--------------|
| NS/EW Streets:              | Green St NE_Riverside Dr |         |         | Green St NE_Riverside Dr |         |         | Holly Dr  |         |         | Holly Dr  |         |         |              |
|                             | NORTHBOUND               |         |         | SOUTHBOUND               |         |         | EASTBOUND |         |         | WESTBOUND |         |         |              |
| LANES:                      | NL<br>1                  | NT<br>2 | NR<br>2 | SL<br>0                  | ST<br>2 | SR<br>0 | EL<br>0   | ET<br>1 | ER<br>0 | WL<br>0   | WT<br>2 | WR<br>0 | TOTAL        |
| 7:00 AM                     | 2                        | 114     | 57      | 0                        | 252     | 23      | 0         | 0       | 8       | 80        | 25      | 0       | 561          |
| 7:15 AM                     | 3                        | 135     | 98      | 0                        | 268     | 27      | 0         | 0       | 17      | 111       | 47      | 0       | 706          |
| 7:30 AM                     | 8                        | 183     | 89      | 0                        | 389     | 39      | 0         | 0       | 14      | 124       | 50      | 0       | 896          |
| 7:45 AM                     | 3                        | 189     | 71      | 0                        | 360     | 28      | 0         | 2       | 11      | 125       | 50      | 0       | 839          |
| 8:00 AM                     | 4                        | 160     | 60      | 0                        | 314     | 40      | 0         | 0       | 10      | 119       | 54      | 0       | 761          |
| 8:15 AM                     | 4                        | 151     | 76      | 0                        | 328     | 25      | 0         | 0       | 16      | 93        | 35      | 0       | 728          |
| 8:30 AM                     | 4                        | 147     | 80      | 0                        | 244     | 22      | 1         | 0       | 14      | 91        | 47      | 0       | 650          |
| 8:45 AM                     | 5                        | 181     | 79      | 0                        | 269     | 22      | 0         | 0       | 13      | 105       | 34      | 0       | 708          |
| <b>TOTAL VOLUMES :</b>      | 33                       | 1260    | 610     | 0                        | 2424    | 226     | 1         | 2       | 103     | 848       | 342     | 0       | 5849         |
| <b>APPROACH %'s :</b>       | 1.73%                    | 66.21%  | 32.05%  | 0.00%                    | 91.47%  | 8.53%   | 0.94%     | 1.89%   | 97.17%  | 71.26%    | 28.74%  | 0.00%   |              |
| <b>PEAK HR START TIME :</b> | 730 AM                   |         |         |                          |         |         |           |         |         |           |         |         | <b>TOTAL</b> |
| <b>PEAK HR VOL :</b>        | 19                       | 683     | 296     | 0                        | 1391    | 132     | 0         | 2       | 51      | 461       | 189     | 0       | 3224         |
| <b>PEAK HR FACTOR :</b>     | 0.891                    |         |         | 0.890                    |         |         | 0.828     |         |         | 0.929     |         |         | 0.900        |

CONTROL : Signalized

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-9124-004

Day: Wednesday

City: Gainesville

Date: 2/22/2017

| PM                          |                          |            |            |                          |            |           |           |         |          |           |           |         |               |
|-----------------------------|--------------------------|------------|------------|--------------------------|------------|-----------|-----------|---------|----------|-----------|-----------|---------|---------------|
| NS/EW Streets:              | Green St NE_Riverside Dr |            |            | Green St NE_Riverside Dr |            |           | Holly Dr  |         |          | Holly Dr  |           |         |               |
|                             | NORTHBOUND               |            |            | SOUTHBOUND               |            |           | EASTBOUND |         |          | WESTBOUND |           |         |               |
| LANES:                      | NL<br>1                  | NT<br>2    | NR<br>2    | SL<br>0                  | ST<br>2    | SR<br>0   | EL<br>0   | ET<br>1 | ER<br>0  | WL<br>0   | WT<br>2   | WR<br>0 | TOTAL         |
| 4:00 PM                     | 11                       | 255        | 138        | 0                        | 200        | 33        | 0         | 0       | 9        | 106       | 51        | 0       | 803           |
| 4:15 PM                     | 7                        | 326        | 114        | 0                        | 154        | 25        | 0         | 0       | 13       | 62        | 44        | 0       | 745           |
| 4:30 PM                     | 7                        | 316        | 144        | 0                        | 193        | 25        | 0         | 0       | 12       | 92        | 47        | 0       | 836           |
| 4:45 PM                     | 10                       | 314        | 174        | 0                        | 149        | 20        | 0         | 0       | 9        | 88        | 49        | 0       | 813           |
| 5:00 PM                     | 14                       | 380        | 174        | 0                        | 189        | 34        | 0         | 0       | 1        | 94        | 49        | 0       | 935           |
| 5:15 PM                     | 10                       | 346        | 172        | 0                        | 201        | 36        | 0         | 0       | 13       | 106       | 66        | 0       | 950           |
| 5:30 PM                     | 10                       | 327        | 164        | 0                        | 179        | 29        | 0         | 0       | 6        | 104       | 58        | 0       | 877           |
| 5:45 PM                     | 12                       | 359        | 143        | 0                        | 243        | 26        | 0         | 0       | 15       | 83        | 45        | 0       | 926           |
| <b>TOTAL VOLUMES :</b>      | NL<br>81                 | NT<br>2623 | NR<br>1223 | SL<br>0                  | ST<br>1508 | SR<br>228 | EL<br>0   | ET<br>0 | ER<br>78 | WL<br>735 | WT<br>409 | WR<br>0 | TOTAL<br>6885 |
| <b>APPROACH %'s :</b>       | 2.06%                    | 66.79%     | 31.14%     | 0.00%                    | 86.87%     | 13.13%    | 0.00%     | 0.00%   | 100.00%  | 64.25%    | 35.75%    | 0.00%   |               |
| <b>PEAK HR START TIME :</b> | 500 PM                   |            |            |                          |            |           |           |         |          |           |           |         | <b>TOTAL</b>  |
| <b>PEAK HR VOL :</b>        | 46                       | 1412       | 653        | 0                        | 812        | 125       | 0         | 0       | 35       | 387       | 218       | 0       | 3688          |
| <b>PEAK HR FACTOR :</b>     | 0.929                    |            |            | 0.871                    |            |           | 0.583     |         |          | 0.879     |           |         | 0.971         |

CONTROL : Signalized

# ITM Peak Hour Summary

Prepared by:



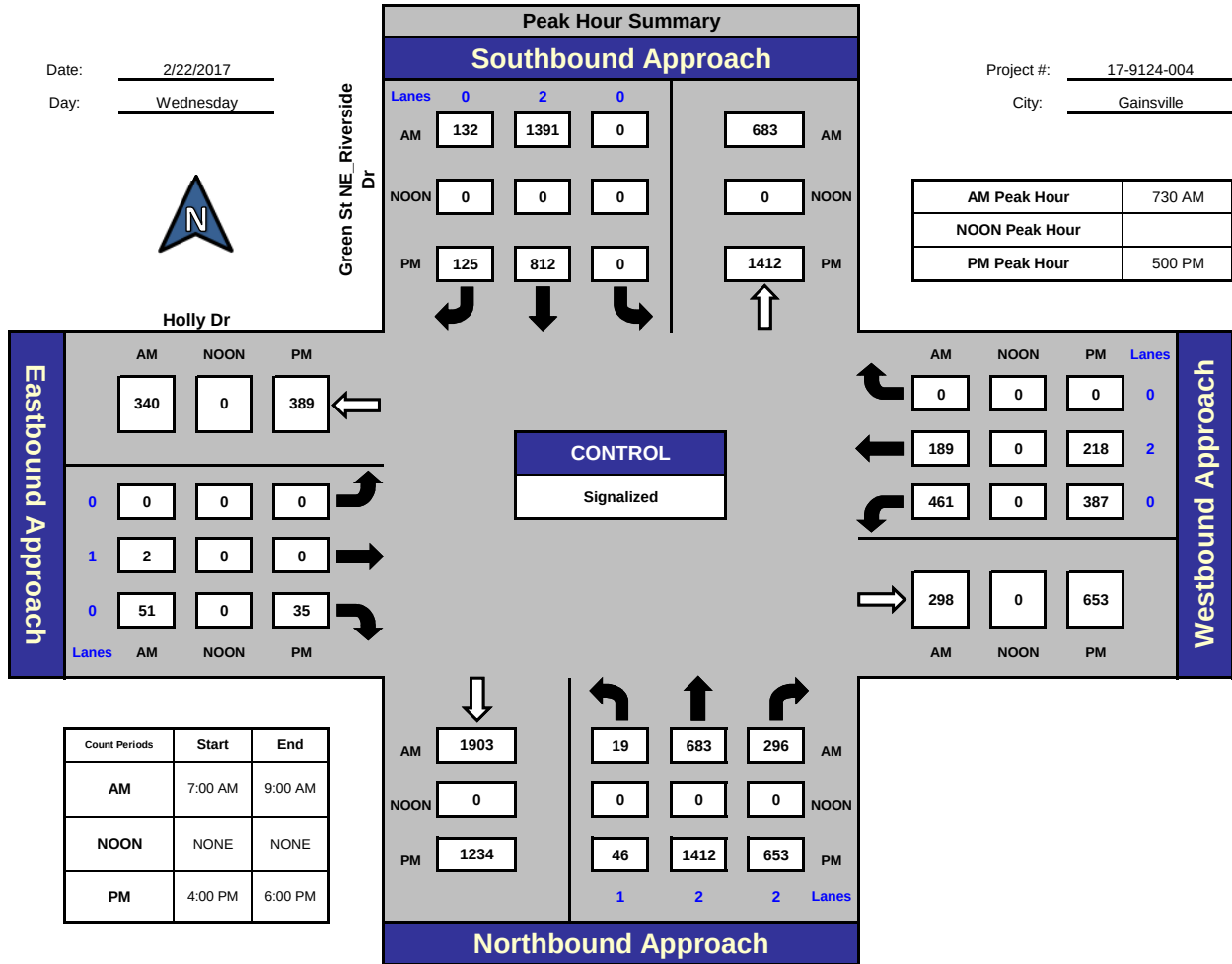
National Data & Surveying Services

## Green St NE Riverside Dr and Holly Dr, Gainesville

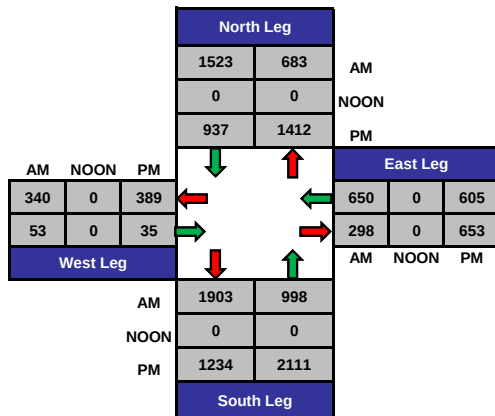
Date: 2/22/2017  
Day: Wednesday



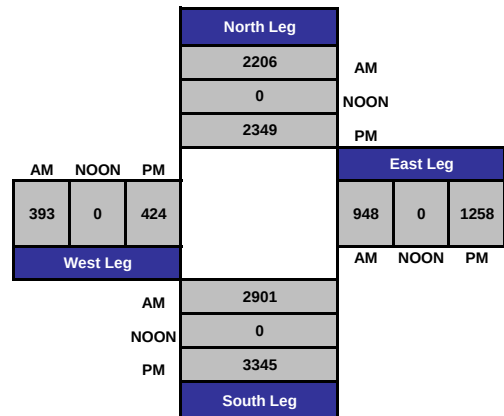
Project #: 17-9124-004  
City: Gainesville



### Total Ins & Outs



### Total Volume Per Leg



**PREPARED BY NATIONAL DATA & SURVEYING SERVICES**

PROJECT#: 17-9124-004  
 N/S Street: Green St NE\_Riverside Dr  
 E/W Street: Holly Dr  
 DATE: 2/22/2017  
 CITY: Gainesville

DAY: Wednesday

**A M**

**PEDESTRIANS**

| T I M E       | NORTH LEG |          | SOUTH LEG |          | EAST LEG |          | WEST LEG |          |
|---------------|-----------|----------|-----------|----------|----------|----------|----------|----------|
|               | EB        | WB       | EB        | WB       | NB       | SB       | NB       | SB       |
| 7:00 AM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 7:15 AM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 7:30 AM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 7:45 AM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 8:00 AM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 8:15 AM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 8:30 AM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 8:45 AM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| <b>TOTALS</b> | <b>0</b>  | <b>0</b> | <b>0</b>  | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> |

**BIKES**

| T I M E       | NB       |          |          | SB       |          |          | EB       |          |          | WB       |          |          |
|---------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|               | NL       | NT       | NR       | SL       | ST       | SR       | EL       | ET       | ER       | WL       | WT       | WR       |
| 7:00 AM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 7:15 AM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 7:30 AM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 7:45 AM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 0        | 0        |
| 8:00 AM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 0        |
| 8:15 AM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 8:30 AM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 8:45 AM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| <b>TOTALS</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>1</b> | <b>1</b> | <b>0</b> | <b>0</b> |

**P M**

**PEDESTRIANS**

| T I M E       | NORTH LEG |          | SOUTH LEG |          | EAST LEG |          | WEST LEG |          |
|---------------|-----------|----------|-----------|----------|----------|----------|----------|----------|
|               | EB        | WB       | EB        | WB       | NB       | SB       | NB       | SB       |
| 4:00 PM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 4:15 PM       | 0         | 0        | 0         | 0        | 0        | 0        | 1        | 1        |
| 4:30 PM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 4:45 PM       | 0         | 0        | 0         | 0        | 0        | 0        | 1        | 0        |
| 5:00 PM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 5:15 PM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 5:30 PM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 5:45 PM       | 0         | 0        | 0         | 0        | 0        | 0        | 1        | 0        |
| <b>TOTALS</b> | <b>0</b>  | <b>0</b> | <b>0</b>  | <b>0</b> | <b>0</b> | <b>0</b> | <b>3</b> | <b>1</b> |

**BIKES**

| T I M E       | NB       |          |          | SB       |          |          | EB       |          |          | WB       |          |          |
|---------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|               | NL       | NT       | NR       | SL       | ST       | SR       | EL       | ET       | ER       | WL       | WT       | WR       |
| 4:00 PM       | 0        | 0        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 4:15 PM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 4:30 PM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 4:45 PM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 5:00 PM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 5:15 PM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 5:30 PM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 5:45 PM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| <b>TOTALS</b> | <b>0</b> | <b>0</b> | <b>1</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> |

Project ID: 17-9124-004  
Location: Green St NE\_Riverside Dr & Holly Dr  
City: Gainesville

Day: Wednesday  
Date: 2/22/2017

| Peak Start Times |          |
|------------------|----------|
| AM               | 7:00 AM  |
| MD               | 12:00 AM |
| PM               | 4:00 PM  |

Groups Printed - Cars, PU, Vans - Heavy Trucks

| Start Time       | Green St NE_Riverside Dr Northbound |      |      |      |            | Green St NE_Riverside Dr Southbound |      |       |      |            | Holly Dr Eastbound |       |       |       |            | Holly Dr Westbound |      |     |      |            | Int. Total |
|------------------|-------------------------------------|------|------|------|------------|-------------------------------------|------|-------|------|------------|--------------------|-------|-------|-------|------------|--------------------|------|-----|------|------------|------------|
|                  | Left                                | Thru | Rgt  | Peds | App. Total | Left                                | Thru | Rgt   | Peds | App. Total | Left               | Thru  | Rgt   | Peds  | App. Total | Left               | Thru | Rgt | Peds | App. Total |            |
| 7:00 AM          | 2                                   | 114  | 57   | 0    | 173        | 0                                   | 252  | 23    | 0    | 275        | 0                  | 0     | 8     | 0     | 8          | 80                 | 25   | 0   | 0    | 105        | 561        |
| 7:15 AM          | 3                                   | 135  | 98   | 0    | 236        | 0                                   | 268  | 27    | 0    | 295        | 0                  | 0     | 17    | 0     | 17         | 111                | 47   | 0   | 0    | 158        | 706        |
| 7:30 AM          | 8                                   | 183  | 89   | 0    | 280        | 0                                   | 389  | 39    | 0    | 428        | 0                  | 0     | 14    | 0     | 14         | 124                | 50   | 0   | 0    | 174        | 896        |
| 7:45 AM          | 3                                   | 189  | 71   | 0    | 263        | 0                                   | 360  | 28    | 0    | 388        | 0                  | 2     | 11    | 0     | 13         | 125                | 50   | 0   | 0    | 175        | 839        |
| Total            | 16                                  | 621  | 315  | 0    | 952        | 0                                   | 1269 | 117   | 0    | 1386       | 0                  | 2     | 50    | 0     | 52         | 440                | 172  | 0   | 0    | 612        | 3002       |
| 8:00 AM          | 4                                   | 160  | 60   | 0    | 224        | 0                                   | 314  | 40    | 0    | 354        | 0                  | 0     | 10    | 0     | 10         | 119                | 54   | 0   | 0    | 173        | 761        |
| 8:15 AM          | 4                                   | 151  | 76   | 0    | 231        | 0                                   | 328  | 25    | 0    | 353        | 0                  | 0     | 16    | 0     | 16         | 93                 | 35   | 0   | 0    | 128        | 728        |
| 8:30 AM          | 4                                   | 147  | 80   | 0    | 231        | 0                                   | 244  | 22    | 0    | 266        | 1                  | 0     | 14    | 0     | 15         | 91                 | 47   | 0   | 0    | 138        | 650        |
| 8:45 AM          | 5                                   | 181  | 79   | 0    | 265        | 0                                   | 269  | 22    | 0    | 291        | 0                  | 0     | 13    | 0     | 13         | 105                | 34   | 0   | 0    | 139        | 708        |
| Total            | 17                                  | 639  | 295  | 0    | 951        | 0                                   | 1155 | 109   | 0    | 1264       | 1                  | 0     | 53    | 0     | 54         | 408                | 170  | 0   | 0    | 578        | 2847       |
| ***BREAK***      |                                     |      |      |      |            |                                     |      |       |      |            |                    |       |       |       |            |                    |      |     |      |            |            |
| 4:00 PM          | 11                                  | 255  | 138  | 0    | 404        | 0                                   | 200  | 33    | 0    | 233        | 0                  | 0     | 9     | 0     | 9          | 106                | 51   | 0   | 0    | 157        | 803        |
| 4:15 PM          | 7                                   | 326  | 114  | 0    | 447        | 0                                   | 154  | 25    | 0    | 179        | 0                  | 0     | 13    | 2     | 13         | 62                 | 44   | 0   | 0    | 106        | 745        |
| 4:30 PM          | 7                                   | 316  | 144  | 0    | 467        | 0                                   | 193  | 25    | 0    | 218        | 0                  | 0     | 12    | 0     | 12         | 92                 | 47   | 0   | 0    | 139        | 836        |
| 4:45 PM          | 10                                  | 314  | 174  | 0    | 498        | 0                                   | 149  | 20    | 0    | 169        | 0                  | 0     | 9     | 1     | 9          | 88                 | 49   | 0   | 0    | 137        | 813        |
| Total            | 35                                  | 1211 | 570  | 0    | 1816       | 0                                   | 696  | 103   | 0    | 799        | 0                  | 0     | 43    | 3     | 43         | 348                | 191  | 0   | 0    | 539        | 3197       |
| 5:00 PM          | 14                                  | 380  | 174  | 0    | 568        | 0                                   | 189  | 34    | 0    | 223        | 0                  | 0     | 1     | 0     | 1          | 94                 | 49   | 0   | 0    | 143        | 935        |
| 5:15 PM          | 10                                  | 346  | 172  | 0    | 528        | 0                                   | 201  | 36    | 0    | 237        | 0                  | 0     | 13    | 0     | 13         | 106                | 66   | 0   | 0    | 172        | 950        |
| 5:30 PM          | 10                                  | 327  | 164  | 0    | 501        | 0                                   | 179  | 29    | 0    | 208        | 0                  | 0     | 6     | 0     | 6          | 104                | 58   | 0   | 0    | 162        | 877        |
| 5:45 PM          | 12                                  | 359  | 143  | 0    | 514        | 0                                   | 243  | 26    | 0    | 269        | 0                  | 0     | 15    | 1     | 15         | 83                 | 45   | 0   | 0    | 128        | 926        |
| Total            | 46                                  | 1412 | 653  | 0    | 2111       | 0                                   | 812  | 125   | 0    | 937        | 0                  | 0     | 35    | 1     | 35         | 387                | 218  | 0   | 0    | 605        | 3688       |
| Grand Total      | 114                                 | 3883 | 1833 | 0    | 5830       | 0                                   | 3932 | 454   | 0    | 4386       | 1                  | 2     | 181   | 4     | 184        | 1583               | 751  | 0   | 0    | 2334       | 12734      |
| Apprch %         | 2.0                                 | 66.6 | 31.4 | 0.0  |            | 0.0                                 | 89.6 | 10.4  | 0.0  |            | 0.5                | 1.1   | 98.4  | 2.2   |            | 67.8               | 32.2 | 0.0 | 0.0  |            |            |
| Total %          | 0.9                                 | 30.5 | 14.4 | 0.0  | 45.8       | 0.0                                 | 30.9 | 3.6   | 0.0  | 34.4       | 0.0                | 0.0   | 1.4   | 0.0   | 1.4        | 12.4               | 5.9  | 0.0 | 0.0  | 18.3       |            |
| Cars, PU, Vans   | 114                                 | 3826 | 1828 | 0    | 5768       | 0                                   | 3881 | 454   | 0    | 4335       | 1                  | 2     | 181   | 4     | 184        | 1575               | 750  | 0   | 0    | 2325       | 12612      |
| % Cars, PU, Vans | 100.0                               | 98.5 | 99.7 | 0.0  | 98.9       | 0.0                                 | 98.7 | 100.0 | 0.0  | 98.8       | 100.0              | 100.0 | 100.0 | 100.0 | 100.0      | 99.5               | 99.9 | 0.0 | 0.0  | 99.6       | 99.0       |
| Heavy Trucks     | 0                                   | 57   | 5    |      | 62         | 0                                   | 51   | 0     |      | 51         | 0                  | 0     | 0     |       | 0          | 8                  | 1    | 0   |      | 9          | 122        |
| %Heavy Trucks    | 0.0                                 | 1.5  | 0.3  | 0.0  | 1.1        | 0.0                                 | 1.3  | 0.0   | 0.0  | 1.2        | 0.0                | 0.0   | 0.0   | 0.0   | 0.0        | 0.5                | 0.1  | 0.0 | 0.0  | 0.4        | 1.0        |



Project ID: 17-9124-004

Location: Green St NE\_Riverside Dr &amp;

City: Gainesville

**PEAK HOURS**

Day: Wednesday

Date: 2/22/2017

**AM**

|                                                      | Green St NE_Riverside Dr<br>Northbound |      |      |            | Green St NE_Riverside Dr<br>Southbound |      |       |            | Holly Dr<br>Eastbound |       |       |            | Holly Dr<br>Westbound |       |     |            |            |
|------------------------------------------------------|----------------------------------------|------|------|------------|----------------------------------------|------|-------|------------|-----------------------|-------|-------|------------|-----------------------|-------|-----|------------|------------|
| Start Time                                           | Left                                   | Thru | Rgt  | App. Total | Left                                   | Thru | Rgt   | App. Total | Left                  | Thru  | Rgt   | App. Total | Left                  | Thru  | Rgt | App. Total | Int. Total |
| Peak Hour Analysis from 07:00 AM to 09:00 AM         |                                        |      |      |            |                                        |      |       |            |                       |       |       |            |                       |       |     |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM |                                        |      |      |            |                                        |      |       |            |                       |       |       |            |                       |       |     |            |            |
| 7:30 AM                                              | 8                                      | 183  | 89   | 280        | 0                                      | 389  | 39    | 428        | 0                     | 0     | 14    | 14         | 124                   | 50    | 0   | 174        | 896        |
| 7:45 AM                                              | 3                                      | 189  | 71   | 263        | 0                                      | 360  | 28    | 388        | 0                     | 2     | 11    | 13         | 125                   | 50    | 0   | 175        | 839        |
| 8:00 AM                                              | 4                                      | 160  | 60   | 224        | 0                                      | 314  | 40    | 354        | 0                     | 0     | 10    | 10         | 119                   | 54    | 0   | 173        | 761        |
| 8:15 AM                                              | 4                                      | 151  | 76   | 231        | 0                                      | 328  | 25    | 353        | 0                     | 0     | 16    | 16         | 93                    | 35    | 0   | 128        | 728        |
| Total Volume                                         | 19                                     | 683  | 296  | 998        | 0                                      | 1391 | 132   | 1523       | 0                     | 2     | 51    | 53         | 461                   | 189   | 0   | 650        | 3224       |
| % App. Total                                         | 1.9                                    | 68.4 | 29.7 | 100        | 0.0                                    | 91.3 | 8.7   | 100        | 0.0                   | 3.8   | 96.2  | 100        | 70.9                  | 29.1  | 0.0 | 100        |            |
| PHF                                                  | 0.891                                  |      |      |            | 0.890                                  |      |       |            | 0.828                 |       |       |            | 0.929                 |       |     |            |            |
| Cars, PU, Vans                                       | 19                                     | 668  | 294  | 981        | 0                                      | 1377 | 132   | 1509       | 0                     | 2     | 51    | 53         | 458                   | 189   | 0   | 647        | 3190       |
| % Cars, PU, Vans                                     | 100.0                                  | 97.8 | 99.3 | 98.3       | 0.0                                    | 99.0 | 100.0 | 99.1       | 0.0                   | 100.0 | 100.0 | 100.0      | 99.3                  | 100.0 | 0.0 | 99.5       | 98.9       |
| Heavy Trucks                                         | 0                                      | 15   | 2    | 17         | 0                                      | 14   | 0     | 14         | 0                     | 0     | 0     | 0          | 3                     | 0     | 0   | 3          | 34         |
| %Heavy Trucks                                        | 0.0                                    | 2.2  | 0.7  | 1.7        | 0.0                                    | 1.0  | 0.0   | 0.9        | 0.0                   | 0.0   | 0.0   | 0.0        | 0.7                   | 0.0   | 0.0 | 0.5        | 1.1        |

**PM**

|                                                      | Green St NE_Riverside Dr<br>Northbound |      |      |            | Green St NE_Riverside Dr<br>Southbound |      |       |            | Holly Dr<br>Eastbound |      |       |            | Holly Dr<br>Westbound |       |     |            |            |
|------------------------------------------------------|----------------------------------------|------|------|------------|----------------------------------------|------|-------|------------|-----------------------|------|-------|------------|-----------------------|-------|-----|------------|------------|
| Start Time                                           | Left                                   | Thru | Rgt  | App. Total | Left                                   | Thru | Rgt   | App. Total | Left                  | Thru | Rgt   | App. Total | Left                  | Thru  | Rgt | App. Total | Int. Total |
| Peak Hour Analysis from 04:00 PM to 06:00 PM         |                                        |      |      |            |                                        |      |       |            |                       |      |       |            |                       |       |     |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM |                                        |      |      |            |                                        |      |       |            |                       |      |       |            |                       |       |     |            |            |
| 5:00 PM                                              | 14                                     | 380  | 174  | 568        | 0                                      | 189  | 34    | 223        | 0                     | 0    | 1     | 1          | 94                    | 49    | 0   | 143        | 935        |
| 5:15 PM                                              | 10                                     | 346  | 172  | 528        | 0                                      | 201  | 36    | 237        | 0                     | 0    | 13    | 13         | 106                   | 66    | 0   | 172        | 950        |
| 5:30 PM                                              | 10                                     | 327  | 164  | 501        | 0                                      | 179  | 29    | 208        | 0                     | 0    | 6     | 6          | 104                   | 58    | 0   | 162        | 877        |
| 5:45 PM                                              | 12                                     | 359  | 143  | 514        | 0                                      | 243  | 26    | 269        | 0                     | 0    | 15    | 15         | 83                    | 45    | 0   | 128        | 926        |
| Total Volume                                         | 46                                     | 1412 | 653  | 2111       | 0                                      | 812  | 125   | 937        | 0                     | 0    | 35    | 35         | 387                   | 218   | 0   | 605        | 3688       |
| % App. Total                                         | 2.2                                    | 66.9 | 30.9 | 100        | 0.0                                    | 86.7 | 13.3  | 100        | 0.0                   | 0.0  | 100.0 | 100        | 64.0                  | 36.0  | 0.0 | 100        |            |
| PHF                                                  | 0.929                                  |      |      |            | 0.871                                  |      |       |            | 0.583                 |      |       |            | 0.879                 |       |     |            |            |
| Cars, PU, Vans                                       | 46                                     | 1401 | 652  | 2099       | 0                                      | 805  | 125   | 930        | 0                     | 0    | 35    | 35         | 386                   | 218   | 0   | 604        | 3668       |
| % Cars, PU, Vans                                     | 100.0                                  | 99.2 | 99.8 | 99.4       | 0.0                                    | 99.1 | 100.0 | 99.3       | 0.0                   | 0.0  | 100.0 | 100.0      | 99.7                  | 100.0 | 0.0 | 99.8       | 99.5       |
| Heavy Trucks                                         | 0                                      | 11   | 1    | 12         | 0                                      | 7    | 0     | 7          | 0                     | 0    | 0     | 0          | 1                     | 0     | 0   | 1          | 20         |
| %Heavy Trucks                                        | 0.0                                    | 0.8  | 0.2  | 0.6        | 0.0                                    | 0.9  | 0.0   | 0.7        | 0.0                   | 0.0  | 0.0   | 0.0        | 0.3                   | 0.0   | 0.0 | 0.2        | 0.5        |

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-9124-004

Day: Wednesday

City: Gainesville

Date: 2/22/2017

| AM                          |                          |         |         |                          |         |         |           |         |         |           |         |         |       |
|-----------------------------|--------------------------|---------|---------|--------------------------|---------|---------|-----------|---------|---------|-----------|---------|---------|-------|
| NS/EW Streets:              | Green St NE_Riverside Dr |         |         | Green St NE_Riverside Dr |         |         | Holly Dr  |         |         | Holly Dr  |         |         |       |
|                             | NORTHBOUND               |         |         | SOUTHBOUND               |         |         | EASTBOUND |         |         | WESTBOUND |         |         |       |
| LANES:                      | NL<br>1                  | NT<br>2 | NR<br>2 | SL<br>0                  | ST<br>2 | SR<br>0 | EL<br>0   | ET<br>1 | ER<br>0 | WL<br>0   | WT<br>2 | WR<br>0 | TOTAL |
| 7:00 AM                     | 0                        | 6       | 0       | 0                        | 5       | 0       | 0         | 0       | 0       | 0         | 0       | 0       | 11    |
| 7:15 AM                     | 0                        | 11      | 0       | 0                        | 3       | 0       | 0         | 0       | 0       | 1         | 0       | 0       | 15    |
| 7:30 AM                     | 0                        | 3       | 1       | 0                        | 3       | 0       | 0         | 0       | 0       | 2         | 0       | 0       | 9     |
| 7:45 AM                     | 0                        | 6       | 0       | 0                        | 1       | 0       | 0         | 0       | 0       | 0         | 0       | 0       | 7     |
| 8:00 AM                     | 0                        | 3       | 1       | 0                        | 3       | 0       | 0         | 0       | 0       | 1         | 0       | 0       | 8     |
| 8:15 AM                     | 0                        | 3       | 0       | 0                        | 7       | 0       | 0         | 0       | 0       | 0         | 0       | 0       | 10    |
| 8:30 AM                     | 0                        | 3       | 0       | 0                        | 3       | 0       | 0         | 0       | 0       | 0         | 0       | 0       | 6     |
| 8:45 AM                     | 0                        | 2       | 1       | 0                        | 2       | 0       | 0         | 0       | 0       | 1         | 1       | 0       | 7     |
| <b>TOTAL VOLUMES :</b>      | 0                        | 37      | 3       | 0                        | 27      | 0       | 0         | 0       | 0       | 5         | 1       | 0       | 73    |
| <b>APPROACH %'s :</b>       | 0.00%                    | 92.50%  | 7.50%   | 0.00%                    | 100.00% | 0.00%   | #DIV/0!   | #DIV/0! | #DIV/0! | 83.33%    | 16.67%  | 0.00%   |       |
| <b>PEAK HR START TIME :</b> | 730 AM                   |         |         |                          |         |         |           |         |         |           |         |         |       |
| <b>PEAK HR VOL :</b>        | 0                        | 15      | 2       | 0                        | 14      | 0       | 0         | 0       | 0       | 3         | 0       | 0       | 34    |
| <b>PEAK HR FACTOR :</b>     | 0.708                    |         |         | 0.500                    |         |         | 0.000     |         |         | 0.375     |         |         | 0.850 |

CONTROL : Signalized

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-9124-004

Day: Wednesday

City: Gainesville

Date: 2/22/2017

| PM                          |                          |         |         |                          |         |         |           |         |         |           |         |         |       |
|-----------------------------|--------------------------|---------|---------|--------------------------|---------|---------|-----------|---------|---------|-----------|---------|---------|-------|
| NS/EW Streets:              | Green St NE_Riverside Dr |         |         | Green St NE_Riverside Dr |         |         | Holly Dr  |         |         | Holly Dr  |         |         |       |
|                             | NORTHBOUND               |         |         | SOUTHBOUND               |         |         | EASTBOUND |         |         | WESTBOUND |         |         |       |
| LANES:                      | NL<br>1                  | NT<br>2 | NR<br>2 | SL<br>0                  | ST<br>2 | SR<br>0 | EL<br>0   | ET<br>1 | ER<br>0 | WL<br>0   | WT<br>2 | WR<br>0 | TOTAL |
| 4:00 PM                     | 0                        | 2       | 1       | 0                        | 6       | 0       | 0         | 0       | 0       | 1         | 0       | 0       | 10    |
| 4:15 PM                     | 0                        | 4       | 0       | 0                        | 5       | 0       | 0         | 0       | 0       | 1         | 0       | 0       | 10    |
| 4:30 PM                     | 0                        | 2       | 0       | 0                        | 5       | 0       | 0         | 0       | 0       | 0         | 0       | 0       | 7     |
| 4:45 PM                     | 0                        | 1       | 0       | 0                        | 1       | 0       | 0         | 0       | 0       | 0         | 0       | 0       | 2     |
| 5:00 PM                     | 0                        | 0       | 0       | 0                        | 0       | 0       | 0         | 0       | 0       | 1         | 0       | 0       | 1     |
| 5:15 PM                     | 0                        | 6       | 1       | 0                        | 1       | 0       | 0         | 0       | 0       | 0         | 0       | 0       | 8     |
| 5:30 PM                     | 0                        | 2       | 0       | 0                        | 2       | 0       | 0         | 0       | 0       | 0         | 0       | 0       | 4     |
| 5:45 PM                     | 0                        | 3       | 0       | 0                        | 4       | 0       | 0         | 0       | 0       | 0         | 0       | 0       | 7     |
| <b>TOTAL VOLUMES :</b>      | 0                        | 20      | 2       | 0                        | 24      | 0       | 0         | 0       | 0       | 3         | 0       | 0       | 49    |
| <b>APPROACH %'s :</b>       | 0.00%                    | 90.91%  | 9.09%   | 0.00%                    | 100.00% | 0.00%   | #DIV/0!   | #DIV/0! | #DIV/0! | 100.00%   | 0.00%   | 0.00%   |       |
| <b>PEAK HR START TIME :</b> | 500 PM                   |         |         |                          |         |         |           |         |         |           |         |         |       |
| <b>PEAK HR VOL :</b>        | 0                        | 11      | 1       | 0                        | 7       | 0       | 0         | 0       | 0       | 1         | 0       | 0       | 20    |
| <b>PEAK HR FACTOR :</b>     | 0.429                    |         |         | 0.438                    |         |         | 0.000     |         |         | 0.250     |         |         | 0.625 |

CONTROL : Signalized

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-9124-007

Day: Wednesday

City: Gainesville

Date: 2/22/2017

| AM                          |                       |            |          |                       |            |          |               |         |          |               |         |         |               |
|-----------------------------|-----------------------|------------|----------|-----------------------|------------|----------|---------------|---------|----------|---------------|---------|---------|---------------|
| NS/EW Streets:              | Green St_State Hwy 11 |            |          | Green St_State Hwy 11 |            |          | Ridgewood Ave |         |          | Ridgewood Ave |         |         |               |
|                             | NORTHBOUND            |            |          | SOUTHBOUND            |            |          | EASTBOUND     |         |          | WESTBOUND     |         |         |               |
| LANES:                      | NL<br>0               | NT<br>2    | NR<br>0  | SL<br>0               | ST<br>2    | SR<br>0  | EL<br>0       | ET<br>1 | ER<br>0  | WL<br>0       | WT<br>1 | WR<br>0 | TOTAL         |
| 7:00 AM                     | 0                     | 140        | 1        | 0                     | 316        | 3        | 26            | 0       | 4        | 1             | 0       | 0       | 491           |
| 7:15 AM                     | 2                     | 205        | 0        | 0                     | 371        | 5        | 39            | 0       | 5        | 0             | 1       | 0       | 628           |
| 7:30 AM                     | 0                     | 242        | 0        | 0                     | 511        | 12       | 41            | 1       | 6        | 1             | 0       | 1       | 815           |
| 7:45 AM                     | 5                     | 226        | 1        | 0                     | 459        | 15       | 39            | 2       | 9        | 1             | 1       | 1       | 759           |
| 8:00 AM                     | 6                     | 203        | 3        | 1                     | 420        | 16       | 30            | 2       | 5        | 3             | 4       | 0       | 693           |
| 8:15 AM                     | 3                     | 207        | 7        | 3                     | 408        | 20       | 21            | 0       | 2        | 1             | 1       | 0       | 673           |
| 8:30 AM                     | 5                     | 211        | 2        | 1                     | 342        | 14       | 23            | 0       | 4        | 0             | 1       | 0       | 603           |
| 8:45 AM                     | 3                     | 248        | 5        | 1                     | 371        | 11       | 19            | 0       | 4        | 1             | 0       | 0       | 663           |
| <b>TOTAL VOLUMES :</b>      | NL<br>24              | NT<br>1682 | NR<br>19 | SL<br>6               | ST<br>3198 | SR<br>96 | EL<br>238     | ET<br>5 | ER<br>39 | WL<br>8       | WT<br>8 | WR<br>2 | TOTAL<br>5325 |
| <b>APPROACH %'s :</b>       | 1.39%                 | 97.51%     | 1.10%    | 0.18%                 | 96.91%     | 2.91%    | 84.40%        | 1.77%   | 13.83%   | 44.44%        | 44.44%  | 11.11%  |               |
| <b>PEAK HR START TIME :</b> | 730 AM                |            |          |                       |            |          |               |         |          |               |         |         | <b>TOTAL</b>  |
| <b>PEAK HR VOL :</b>        | 14                    | 878        | 11       | 4                     | 1798       | 63       | 131           | 5       | 22       | 6             | 6       | 2       | 2940          |
| <b>PEAK HR FACTOR :</b>     | 0.933                 |            |          | 0.891                 |            |          | 0.790         |         |          | 0.500         |         |         | 0.902         |

CONTROL : Signalized

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-9124-007

Day: Wednesday

City: Gainesville

Date: 2/22/2017

| PM                          |                       |            |          |                       |            |           |               |          |          |               |          |          |               |
|-----------------------------|-----------------------|------------|----------|-----------------------|------------|-----------|---------------|----------|----------|---------------|----------|----------|---------------|
| NS/EW Streets:              | Green St_State Hwy 11 |            |          | Green St_State Hwy 11 |            |           | Ridgewood Ave |          |          | Ridgewood Ave |          |          |               |
|                             | NORTHBOUND            |            |          | SOUTHBOUND            |            |           | EASTBOUND     |          |          | WESTBOUND     |          |          |               |
| LANES:                      | NL<br>0               | NT<br>2    | NR<br>0  | SL<br>0               | ST<br>2    | SR<br>0   | EL<br>0       | ET<br>1  | ER<br>0  | WL<br>0       | WT<br>1  | WR<br>0  | TOTAL         |
| 4:00 PM                     | 9                     | 362        | 1        | 1                     | 283        | 18        | 32            | 2        | 6        | 6             | 1        | 2        | 723           |
| 4:15 PM                     | 11                    | 413        | 4        | 0                     | 221        | 18        | 42            | 1        | 6        | 3             | 1        | 1        | 721           |
| 4:30 PM                     | 7                     | 410        | 1        | 0                     | 271        | 16        | 53            | 2        | 3        | 4             | 0        | 3        | 770           |
| 4:45 PM                     | 10                    | 447        | 2        | 0                     | 207        | 9         | 69            | 1        | 3        | 2             | 1        | 1        | 752           |
| 5:00 PM                     | 6                     | 500        | 3        | 0                     | 265        | 20        | 67            | 1        | 4        | 2             | 8        | 1        | 877           |
| 5:15 PM                     | 4                     | 448        | 1        | 0                     | 269        | 19        | 74            | 1        | 2        | 3             | 1        | 1        | 823           |
| 5:30 PM                     | 4                     | 464        | 4        | 0                     | 251        | 19        | 51            | 3        | 10       | 4             | 4        | 3        | 817           |
| 5:45 PM                     | 9                     | 437        | 2        | 0                     | 312        | 15        | 60            | 3        | 4        | 2             | 1        | 0        | 845           |
| <b>TOTAL VOLUMES :</b>      | NL<br>60              | NT<br>3481 | NR<br>18 | SL<br>1               | ST<br>2079 | SR<br>134 | EL<br>448     | ET<br>14 | ER<br>38 | WL<br>26      | WT<br>17 | WR<br>12 | TOTAL<br>6328 |
| <b>APPROACH %'s :</b>       | 1.69%                 | 97.81%     | 0.51%    | 0.05%                 | 93.90%     | 6.05%     | 89.60%        | 2.80%    | 7.60%    | 47.27%        | 30.91%   | 21.82%   |               |
| <b>PEAK HR START TIME :</b> | 500 PM                |            |          |                       |            |           |               |          |          |               |          |          | <b>TOTAL</b>  |
| <b>PEAK HR VOL :</b>        | 23                    | 1849       | 10       | 0                     | 1097       | 73        | 252           | 8        | 20       | 11            | 14       | 5        | 3362          |
| <b>PEAK HR FACTOR :</b>     | 0.924                 |            |          | 0.894                 |            |           | 0.909         |          |          | 0.682         |          |          | 0.958         |

CONTROL : Signalized

# ITM Peak Hour Summary

Prepared by:

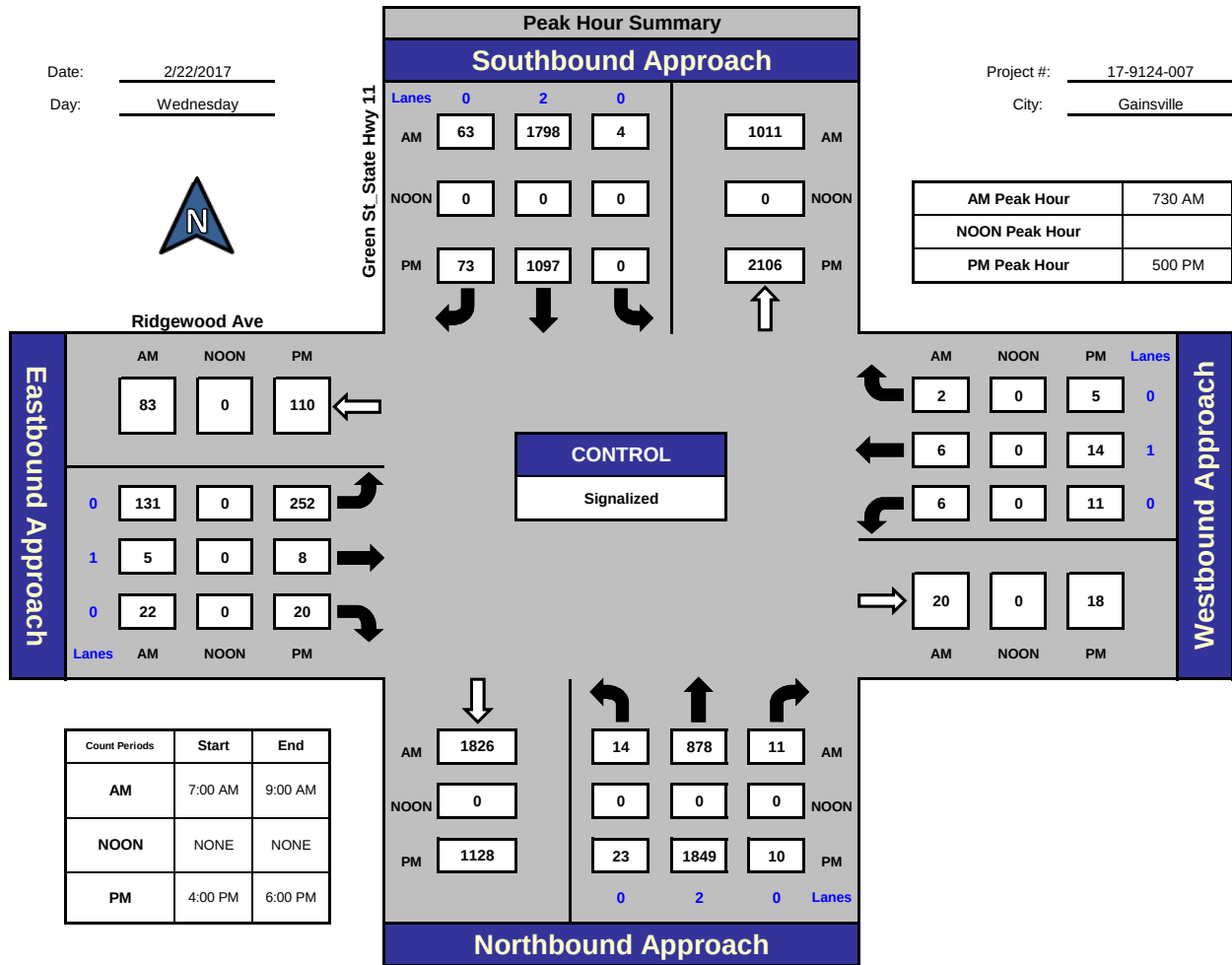


National Data & Surveying Services

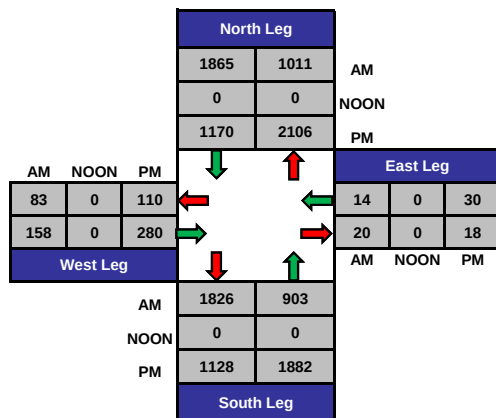
## Green St State Hwy 11 and Ridgewood Ave , Gainesville

Date: 2/22/2017  
Day: Wednesday

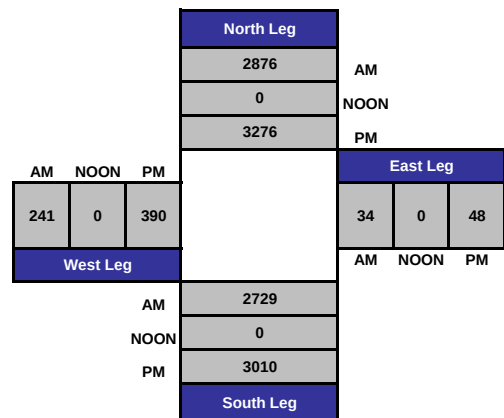
Project #: 17-9124-007  
City: Gainesville



### Total Ins & Outs



### Total Volume Per Leg



# PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 17-9124-007  
N/S Street: Green St\_State Hwy 11  
E/W Street: Ridgewood Ave  
DATE: 2/22/2017  
CITY: Gainesville

DAY: Wednesday

## A M

### PEDESTRIANS

| T I M E       | NORTH LEG |          | SOUTH LEG |          | EAST LEG |          | WEST LEG |          |
|---------------|-----------|----------|-----------|----------|----------|----------|----------|----------|
|               | EB        | WB       | EB        | WB       | NB       | SB       | NB       | SB       |
| 7:00 AM       | 0         | 0        | 1         | 0        | 0        | 0        | 0        | 1        |
| 7:15 AM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 1        |
| 7:30 AM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 7:45 AM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 8:00 AM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 8:15 AM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 8:30 AM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| 8:45 AM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 0        |
| <b>TOTALS</b> | <b>0</b>  | <b>0</b> | <b>1</b>  | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>2</b> |

### BIKES

| T I M E       | NB       |          |          | SB       |          |          | EB       |          |          | WB       |          |          |
|---------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|               | NL       | NT       | NR       | SL       | ST       | SR       | EL       | ET       | ER       | WL       | WT       | WR       |
| 7:00 AM       | 0        | 0        | 0        | 0        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 7:15 AM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 7:30 AM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 7:45 AM       | 0        | 0        | 0        | 0        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 8:00 AM       | 0        | 0        | 0        | 0        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 8:15 AM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 8:30 AM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 8:45 AM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| <b>TOTALS</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>3</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> |

## P M

### PEDESTRIANS

| T I M E       | NORTH LEG |          | SOUTH LEG |          | EAST LEG |          | WEST LEG |          |
|---------------|-----------|----------|-----------|----------|----------|----------|----------|----------|
|               | EB        | WB       | EB        | WB       | NB       | SB       | NB       | SB       |
| 4:00 PM       | 0         | 1        | 0         | 0        | 0        | 0        | 1        | 1        |
| 4:15 PM       | 0         | 0        | 2         | 0        | 2        | 0        | 1        | 0        |
| 4:30 PM       | 1         | 0        | 0         | 0        | 0        | 1        | 0        | 0        |
| 4:45 PM       | 0         | 0        | 0         | 0        | 1        | 0        | 0        | 0        |
| 5:00 PM       | 0         | 0        | 0         | 0        | 0        | 0        | 0        | 1        |
| 5:15 PM       | 0         | 0        | 0         | 0        | 0        | 2        | 0        | 0        |
| 5:30 PM       | 0         | 0        | 0         | 0        | 0        | 1        | 0        | 0        |
| 5:45 PM       | 0         | 2        | 2         | 0        | 0        | 1        | 0        | 2        |
| <b>TOTALS</b> | <b>1</b>  | <b>3</b> | <b>4</b>  | <b>0</b> | <b>3</b> | <b>5</b> | <b>2</b> | <b>4</b> |

### BIKES

| T I M E       | NB       |          |          | SB       |          |          | EB       |          |          | WB       |          |          |
|---------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|               | NL       | NT       | NR       | SL       | ST       | SR       | EL       | ET       | ER       | WL       | WT       | WR       |
| 4:00 PM       | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 0        | 0        | 0        | 0        |
| 4:15 PM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 4:30 PM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 4:45 PM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 5:00 PM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 5:15 PM       | 0        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 5:30 PM       | 0        | 0        | 0        | 0        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 5:45 PM       | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| <b>TOTALS</b> | <b>0</b> | <b>1</b> | <b>0</b> | <b>0</b> | <b>1</b> | <b>0</b> | <b>1</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> |

Project ID: 17-9124-007

Location: Green St State Hwy 11 &amp; Ridgewood Ave

City: Gainesville

Day: Wednesday

Date: 2/22/2017

| Peak Start Times |          |
|------------------|----------|
| AM               | 7:00 AM  |
| MD               | 12:00 AM |
| PM               | 4:00 PM  |

## Groups Printed - Cars, PU, Vans - Heavy Trucks

|                  | Green St State Hwy 11 Northbound |      |       |       |            | Green St State Hwy 11 Southbound |      |       |       |            | Ridgewood Ave Eastbound |       |       |       |            | Ridgewood Ave Westbound |       |       |       |            |            |
|------------------|----------------------------------|------|-------|-------|------------|----------------------------------|------|-------|-------|------------|-------------------------|-------|-------|-------|------------|-------------------------|-------|-------|-------|------------|------------|
| Start Time       | Left                             | Thru | Rgt   | Peds  | App. Total | Left                             | Thru | Rgt   | Peds  | App. Total | Left                    | Thru  | Rgt   | Peds  | App. Total | Left                    | Thru  | Rgt   | Peds  | App. Total | Int. Total |
| 7:00 AM          | 0                                | 140  | 1     | 1     | 141        | 0                                | 316  | 3     | 0     | 319        | 26                      | 0     | 4     | 1     | 30         | 1                       | 0     | 0     | 0     | 1          | 491        |
| 7:15 AM          | 2                                | 205  | 0     | 0     | 207        | 0                                | 371  | 5     | 0     | 376        | 39                      | 0     | 5     | 1     | 44         | 0                       | 1     | 0     | 0     | 1          | 628        |
| 7:30 AM          | 0                                | 242  | 0     | 0     | 242        | 0                                | 511  | 12    | 0     | 523        | 41                      | 1     | 6     | 0     | 48         | 1                       | 0     | 1     | 0     | 2          | 815        |
| 7:45 AM          | 5                                | 226  | 1     | 0     | 232        | 0                                | 459  | 15    | 0     | 474        | 39                      | 2     | 9     | 0     | 50         | 1                       | 1     | 1     | 0     | 3          | 759        |
| Total            | 7                                | 813  | 2     | 1     | 822        | 0                                | 1657 | 35    | 0     | 1692       | 145                     | 3     | 24    | 2     | 172        | 3                       | 2     | 2     | 0     | 7          | 2693       |
| 8:00 AM          | 6                                | 203  | 3     | 0     | 212        | 1                                | 420  | 16    | 0     | 437        | 30                      | 2     | 5     | 0     | 37         | 3                       | 4     | 0     | 0     | 7          | 693        |
| 8:15 AM          | 3                                | 207  | 7     | 0     | 217        | 3                                | 408  | 20    | 0     | 431        | 21                      | 0     | 2     | 0     | 23         | 1                       | 1     | 0     | 0     | 2          | 673        |
| 8:30 AM          | 5                                | 211  | 2     | 0     | 218        | 1                                | 342  | 14    | 0     | 357        | 23                      | 0     | 4     | 0     | 27         | 0                       | 1     | 0     | 0     | 1          | 603        |
| 8:45 AM          | 3                                | 248  | 5     | 0     | 256        | 1                                | 371  | 11    | 0     | 383        | 19                      | 0     | 4     | 0     | 23         | 1                       | 0     | 0     | 0     | 1          | 663        |
| Total            | 17                               | 869  | 17    | 0     | 903        | 6                                | 1541 | 61    | 0     | 1608       | 93                      | 2     | 15    | 0     | 110        | 5                       | 6     | 0     | 0     | 11         | 2632       |
| ***BREAK***      |                                  |      |       |       |            |                                  |      |       |       |            |                         |       |       |       |            |                         |       |       |       |            |            |
| 4:00 PM          | 9                                | 362  | 1     | 0     | 372        | 1                                | 283  | 18    | 1     | 302        | 32                      | 2     | 6     | 2     | 40         | 6                       | 1     | 2     | 0     | 9          | 723        |
| 4:15 PM          | 11                               | 413  | 4     | 2     | 428        | 0                                | 221  | 18    | 0     | 239        | 42                      | 1     | 6     | 1     | 49         | 3                       | 1     | 1     | 2     | 5          | 721        |
| 4:30 PM          | 7                                | 410  | 1     | 0     | 418        | 0                                | 271  | 16    | 1     | 287        | 53                      | 2     | 3     | 0     | 58         | 4                       | 0     | 3     | 1     | 7          | 770        |
| 4:45 PM          | 10                               | 447  | 2     | 0     | 459        | 0                                | 207  | 9     | 0     | 216        | 69                      | 1     | 3     | 0     | 73         | 2                       | 1     | 1     | 1     | 4          | 752        |
| Total            | 37                               | 1632 | 8     | 2     | 1677       | 1                                | 982  | 61    | 2     | 1044       | 196                     | 6     | 18    | 3     | 220        | 15                      | 3     | 7     | 4     | 25         | 2966       |
| 5:00 PM          | 6                                | 500  | 3     | 0     | 509        | 0                                | 265  | 20    | 0     | 285        | 67                      | 1     | 4     | 1     | 72         | 2                       | 8     | 1     | 0     | 11         | 877        |
| 5:15 PM          | 4                                | 448  | 1     | 0     | 453        | 0                                | 269  | 19    | 0     | 288        | 74                      | 1     | 2     | 0     | 77         | 3                       | 1     | 1     | 2     | 5          | 823        |
| 5:30 PM          | 4                                | 464  | 4     | 0     | 472        | 0                                | 251  | 19    | 0     | 270        | 51                      | 3     | 10    | 0     | 64         | 4                       | 4     | 3     | 1     | 11         | 817        |
| 5:45 PM          | 9                                | 437  | 2     | 2     | 448        | 0                                | 312  | 15    | 2     | 327        | 60                      | 3     | 4     | 2     | 67         | 2                       | 1     | 0     | 1     | 3          | 845        |
| Total            | 23                               | 1849 | 10    | 2     | 1882       | 0                                | 1097 | 73    | 2     | 1170       | 252                     | 8     | 20    | 3     | 280        | 11                      | 14    | 5     | 4     | 30         | 3362       |
| Grand Total      | 84                               | 5163 | 37    | 5     | 5284       | 7                                | 5277 | 230   | 4     | 5514       | 686                     | 19    | 77    | 8     | 782        | 34                      | 25    | 14    | 8     | 73         | 11653      |
| Apprch %         | 1.6                              | 97.7 | 0.7   | 0.1   |            | 0.1                              | 95.7 | 4.2   | 0.1   |            | 87.7                    | 2.4   | 9.8   | 1.0   |            | 46.6                    | 34.2  | 19.2  | 11.0  |            |            |
| Total %          | 0.7                              | 44.3 | 0.3   | 0.0   | 45.3       | 0.1                              | 45.3 | 2.0   | 0.0   | 47.3       | 5.9                     | 0.2   | 0.7   | 0.1   | 6.7        | 0.3                     | 0.2   | 0.1   | 0.1   | 0.6        |            |
| Cars, PU, Vans   | 84                               | 5102 | 37    | 5     | 5223       | 7                                | 5220 | 230   | 4     | 5457       | 686                     | 19    | 77    | 8     | 782        | 33                      | 25    | 14    | 8     | 72         | 11534      |
| % Cars, PU, Vans | 100.0                            | 98.8 | 100.0 | 100.0 | 98.8       | 100.0                            | 98.9 | 100.0 | 100.0 | 99.0       | 100.0                   | 100.0 | 100.0 | 100.0 | 100.0      | 97.1                    | 100.0 | 100.0 | 100.0 | 98.6       | 99.0       |
| Heavy Trucks     | 0                                | 61   | 0     |       | 61         | 0                                | 57   | 0     |       | 57         | 0                       | 0     | 0     |       | 0          | 1                       | 0     | 0     |       | 1          | 119        |
| %Heavy Trucks    | 0.0                              | 1.2  | 0.0   | 0.0   | 1.2        | 0.0                              | 1.1  | 0.0   | 0.0   | 1.0        | 0.0                     | 0.0   | 0.0   | 0.0   | 0.0        | 2.9                     | 0.0   | 0.0   | 0.0   | 1.4        | 1.0        |



Project ID: 17-9124-007

Location: Green St\_State Hwy 11 &amp; Ric

City: Gainesville

**PEAK HOURS**

Day: Wednesday

Date: 2/22/2017

**AM**

|                                                      | Green St_State Hwy 11<br>Northbound |      |       |            | Green St_State Hwy 11<br>Southbound |      |       |            | Ridgewood Ave<br>Eastbound |       |       |            | Ridgewood Ave<br>Westbound |       |       |            |            |
|------------------------------------------------------|-------------------------------------|------|-------|------------|-------------------------------------|------|-------|------------|----------------------------|-------|-------|------------|----------------------------|-------|-------|------------|------------|
| Start Time                                           | Left                                | Thru | Rgt   | App. Total | Left                                | Thru | Rgt   | App. Total | Left                       | Thru  | Rgt   | App. Total | Left                       | Thru  | Rgt   | App. Total | Int. Total |
| Peak Hour Analysis from 07:00 AM to 09:00 AM         |                                     |      |       |            |                                     |      |       |            |                            |       |       |            |                            |       |       |            |            |
| Peak Hour for Entire Intersection Begins at 07:30 AM |                                     |      |       |            |                                     |      |       |            |                            |       |       |            |                            |       |       |            |            |
| 7:30 AM                                              | 0                                   | 242  | 0     | 242        | 0                                   | 511  | 12    | 523        | 41                         | 1     | 6     | 48         | 1                          | 0     | 1     | 2          | 815        |
| 7:45 AM                                              | 5                                   | 226  | 1     | 232        | 0                                   | 459  | 15    | 474        | 39                         | 2     | 9     | 50         | 1                          | 1     | 1     | 3          | 759        |
| 8:00 AM                                              | 6                                   | 203  | 3     | 212        | 1                                   | 420  | 16    | 437        | 30                         | 2     | 5     | 37         | 3                          | 4     | 0     | 7          | 693        |
| 8:15 AM                                              | 3                                   | 207  | 7     | 217        | 3                                   | 408  | 20    | 431        | 21                         | 0     | 2     | 23         | 1                          | 1     | 0     | 2          | 673        |
| Total Volume                                         | 14                                  | 878  | 11    | 903        | 4                                   | 1798 | 63    | 1865       | 131                        | 5     | 22    | 158        | 6                          | 6     | 2     | 14         | 2940       |
| % App. Total                                         | 1.6                                 | 97.2 | 1.2   | 100        | 0.2                                 | 96.4 | 3.4   | 100        | 82.9                       | 3.2   | 13.9  | 100        | 42.9                       | 42.9  | 14.3  | 100        |            |
| PHF                                                  | 0.933                               |      |       |            | 0.891                               |      |       |            | 0.790                      |       |       |            | 0.500                      |       |       |            |            |
| Cars, PU, Vans                                       | 14                                  | 862  | 11    | 887        | 4                                   | 1782 | 63    | 1849       | 131                        | 5     | 22    | 158        | 6                          | 6     | 2     | 14         | 2908       |
| % Cars, PU, Vans                                     | 100.0                               | 98.2 | 100.0 | 98.2       | 100.0                               | 99.1 | 100.0 | 99.1       | 100.0                      | 100.0 | 100.0 | 100.0      | 100.0                      | 100.0 | 100.0 | 100.0      | 98.9       |
| Heavy Trucks                                         | 0                                   | 16   | 0     | 16         | 0                                   | 16   | 0     | 16         | 0                          | 0     | 0     | 0          | 0                          | 0     | 0     | 0          | 32         |
| %Heavy Trucks                                        | 0.0                                 | 1.8  | 0.0   | 1.8        | 0.0                                 | 0.9  | 0.0   | 0.9        | 0.0                        | 0.0   | 0.0   | 0.0        | 0.0                        | 0.0   | 0.0   | 0.0        | 1.1        |

**PM**

|                                                      | Green St_State Hwy 11<br>Northbound |      |       |            | Green St_State Hwy 11<br>Southbound |      |       |            | Ridgewood Ave<br>Eastbound |       |       |            | Ridgewood Ave<br>Westbound |       |       |            |            |
|------------------------------------------------------|-------------------------------------|------|-------|------------|-------------------------------------|------|-------|------------|----------------------------|-------|-------|------------|----------------------------|-------|-------|------------|------------|
| Start Time                                           | Left                                | Thru | Rgt   | App. Total | Left                                | Thru | Rgt   | App. Total | Left                       | Thru  | Rgt   | App. Total | Left                       | Thru  | Rgt   | App. Total | Int. Total |
| Peak Hour Analysis from 04:00 PM to 06:00 PM         |                                     |      |       |            |                                     |      |       |            |                            |       |       |            |                            |       |       |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM |                                     |      |       |            |                                     |      |       |            |                            |       |       |            |                            |       |       |            |            |
| 5:00 PM                                              | 6                                   | 500  | 3     | 509        | 0                                   | 265  | 20    | 285        | 67                         | 1     | 4     | 72         | 2                          | 8     | 1     | 11         | 877        |
| 5:15 PM                                              | 4                                   | 448  | 1     | 453        | 0                                   | 269  | 19    | 288        | 74                         | 1     | 2     | 77         | 3                          | 1     | 1     | 5          | 823        |
| 5:30 PM                                              | 4                                   | 464  | 4     | 472        | 0                                   | 251  | 19    | 270        | 51                         | 3     | 10    | 64         | 4                          | 4     | 3     | 11         | 817        |
| 5:45 PM                                              | 9                                   | 437  | 2     | 448        | 0                                   | 312  | 15    | 327        | 60                         | 3     | 4     | 67         | 2                          | 1     | 0     | 3          | 845        |
| Total Volume                                         | 23                                  | 1849 | 10    | 1882       | 0                                   | 1097 | 73    | 1170       | 252                        | 8     | 20    | 280        | 11                         | 14    | 5     | 30         | 3362       |
| % App. Total                                         | 1.2                                 | 98.2 | 0.5   | 100        | 0.0                                 | 93.8 | 6.2   | 100        | 90.0                       | 2.9   | 7.1   | 100        | 36.7                       | 46.7  | 16.7  | 100        |            |
| PHF                                                  | 0.924                               |      |       |            | 0.894                               |      |       |            | 0.909                      |       |       |            | 0.682                      |       |       |            |            |
| Cars, PU, Vans                                       | 23                                  | 1837 | 10    | 1870       | 0                                   | 1091 | 73    | 1164       | 252                        | 8     | 20    | 280        | 11                         | 14    | 5     | 30         | 3344       |
| % Cars, PU, Vans                                     | 100.0                               | 99.4 | 100.0 | 99.4       | 0.0                                 | 99.5 | 100.0 | 99.5       | 100.0                      | 100.0 | 100.0 | 100.0      | 100.0                      | 100.0 | 100.0 | 100.0      | 99.5       |
| Heavy Trucks                                         | 0                                   | 12   | 0     | 12         | 0                                   | 6    | 0     | 6          | 0                          | 0     | 0     | 0          | 0                          | 0     | 0     | 0          | 18         |
| %Heavy Trucks                                        | 0.0                                 | 0.6  | 0.0   | 0.6        | 0.0                                 | 0.5  | 0.0   | 0.5        | 0.0                        | 0.0   | 0.0   | 0.0        | 0.0                        | 0.0   | 0.0   | 0.0        | 0.5        |

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-9124-007

Day: Wednesday

City: Gainesville

Date: 2/22/2017

| AM                          |                       |         |         |                       |         |         |               |         |         |               |         |         |       |
|-----------------------------|-----------------------|---------|---------|-----------------------|---------|---------|---------------|---------|---------|---------------|---------|---------|-------|
| NS/EW Streets:              | Green St_State Hwy 11 |         |         | Green St_State Hwy 11 |         |         | Ridgewood Ave |         |         | Ridgewood Ave |         |         |       |
|                             | NORTHBOUND            |         |         | SOUTHBOUND            |         |         | EASTBOUND     |         |         | WESTBOUND     |         |         |       |
| LANES:                      | NL<br>0               | NT<br>2 | NR<br>0 | SL<br>0               | ST<br>2 | SR<br>0 | EL<br>0       | ET<br>1 | ER<br>0 | WL<br>0       | WT<br>1 | WR<br>0 | TOTAL |
| 7:00 AM                     | 0                     | 5       | 0       | 0                     | 5       | 0       | 0             | 0       | 0       | 1             | 0       | 0       | 11    |
| 7:15 AM                     | 0                     | 12      | 0       | 0                     | 4       | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 16    |
| 7:30 AM                     | 0                     | 3       | 0       | 0                     | 5       | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 8     |
| 7:45 AM                     | 0                     | 6       | 0       | 0                     | 1       | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 7     |
| 8:00 AM                     | 0                     | 4       | 0       | 0                     | 4       | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 8     |
| 8:15 AM                     | 0                     | 3       | 0       | 0                     | 6       | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 9     |
| 8:30 AM                     | 0                     | 3       | 0       | 0                     | 4       | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 7     |
| 8:45 AM                     | 0                     | 3       | 0       | 0                     | 3       | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 6     |
| <b>TOTAL VOLUMES :</b>      | 0                     | 39      | 0       | 0                     | 32      | 0       | 0             | 0       | 0       | 1             | 0       | 0       | 72    |
| <b>APPROACH %'s :</b>       | 0.00%                 | 100.00% | 0.00%   | 0.00%                 | 100.00% | 0.00%   | #DIV/0!       | #DIV/0! | #DIV/0! | 100.00%       | 0.00%   | 0.00%   |       |
| <b>PEAK HR START TIME :</b> | 730 AM                |         |         |                       |         |         |               |         |         |               |         |         |       |
| <b>PEAK HR VOL :</b>        | 0                     | 16      | 0       | 0                     | 16      | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 32    |
| <b>PEAK HR FACTOR :</b>     | 0.667                 |         |         | 0.667                 |         |         | 0.000         |         |         | 0.000         |         |         | 0.889 |

CONTROL : Signalized

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-9124-007

Day: Wednesday

City: Gainesville

Date: 2/22/2017

| PM                          |                       |         |         |                       |         |         |               |         |         |               |         |         |              |
|-----------------------------|-----------------------|---------|---------|-----------------------|---------|---------|---------------|---------|---------|---------------|---------|---------|--------------|
| NS/EW Streets:              | Green St_State Hwy 11 |         |         | Green St_State Hwy 11 |         |         | Ridgewood Ave |         |         | Ridgewood Ave |         |         |              |
|                             | NORTHBOUND            |         |         | SOUTHBOUND            |         |         | EASTBOUND     |         |         | WESTBOUND     |         |         |              |
| LANES:                      | NL<br>0               | NT<br>2 | NR<br>0 | SL<br>0               | ST<br>2 | SR<br>0 | EL<br>0       | ET<br>1 | ER<br>0 | WL<br>0       | WT<br>1 | WR<br>0 | TOTAL        |
| 4:00 PM                     | 0                     | 3       | 0       | 0                     | 6       | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 9            |
| 4:15 PM                     | 0                     | 4       | 0       | 0                     | 7       | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 11           |
| 4:30 PM                     | 0                     | 2       | 0       | 0                     | 4       | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 6            |
| 4:45 PM                     | 0                     | 1       | 0       | 0                     | 2       | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 3            |
| 5:00 PM                     | 0                     | 0       | 0       | 0                     | 1       | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 1            |
| 5:15 PM                     | 0                     | 7       | 0       | 0                     | 1       | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 8            |
| 5:30 PM                     | 0                     | 2       | 0       | 0                     | 2       | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 4            |
| 5:45 PM                     | 0                     | 3       | 0       | 0                     | 2       | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 5            |
| <b>TOTAL VOLUMES :</b>      | 0                     | 22      | 0       | 0                     | 25      | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 47           |
| <b>APPROACH %'s :</b>       | 0.00%                 | 100.00% | 0.00%   | 0.00%                 | 100.00% | 0.00%   | #DIV/0!       | #DIV/0! | #DIV/0! | #DIV/0!       | #DIV/0! | #DIV/0! |              |
| <b>PEAK HR START TIME :</b> | 500 PM                |         |         |                       |         |         |               |         |         |               |         |         | <b>TOTAL</b> |
| <b>PEAK HR VOL :</b>        | 0                     | 12      | 0       | 0                     | 6       | 0       | 0             | 0       | 0       | 0             | 0       | 0       | 18           |
| <b>PEAK HR FACTOR :</b>     | 0.429                 |         |         | 0.750                 |         |         | 0.000         |         |         | 0.000         |         |         | 0.563        |

CONTROL : Signalized

## Appendix B

### Intersection Analysis Methodology

## Intersection Analysis Methodology

The methodology used for evaluating traffic operations at intersections is presented in the Transportation Research Board's *Highway Capacity Manual*, 2010 edition (HCM 2010). Synchro 8 software, which emulates the HCM 2010 methodology, was used for all analyses. The following is an overview of the methodology employed for the analysis of signalized intersections and stop-sign controlled (unsignalized) intersections.

### Signalized Intersections

The criteria for evaluating signalized intersections are capacity and level of service. The capacity analysis of an intersection compares the volume of traffic using the various lane groups at the intersection to the capacity of those lane groups. This produces a volume-to-capacity (v/c) ratio for each lane group. A v/c ratio greater than 1.0 indicates that the volume of traffic has exceeded the capacity available and indicates a temporary excess of demand. The HCM 2010 methodology computes a critical v/c ratio for an intersection based on the critical lane groups or approaches. This critical v/c ratio is an indication of overall intersection sufficiency.

Level of service for a signalized intersection is defined in terms of control delay per vehicle. For signalized intersections, a composite intersection level of service is determined. The thresholds for each level of service are higher for signalized intersections than for unsignalized intersections. This is attributable to a variety of factors including expectation and acceptance of higher delays at signals, and the fact that drivers can relax when waiting at a signal as opposed to having to remain attentive as they proceed through the unsignalized intersection. The level of service criteria for signalized intersections are shown in Table A.

**Table A – Level of Service Criteria for Signalized Intersections**

| Control Delay (s/veh) | Level of Service by Volume-to-Capacity Ratio |      |
|-----------------------|----------------------------------------------|------|
|                       | ≤1.0                                         | >1.0 |
| ≤ 10                  | A                                            | F    |
| > 10 and ≤ 20         | B                                            | F    |
| > 20 and ≤ 35         | C                                            | F    |
| > 35 and ≤ 55         | D                                            | F    |
| > 55 and ≤ 80         | E                                            | F    |
| > 80                  | F                                            | F    |

Source: *Highway Capacity Manual 2010*

### Unsignalized Intersections

The operations at an unsignalized intersection are defined in terms of levels of service. Level of service (LOS) is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. Level of service for an unsignalized intersection is defined in terms of control delay per vehicle. Control delay is that portion of delay attributable to the control device and includes initial deceleration delay, queue move-up time, stopped delay,

and final acceleration delay. The delays at unsignalized intersections are based on gap acceptance theory, factoring in availability of gaps, usefulness of the gaps, and the priority of right-of-way given to each traffic stream.

Levels of service are assigned letters A through F. LOS A indicates operations with very low control delay while LOS F describes operations with high control delay. LOS F is considered to be unacceptable by most drivers, while LOS E is typically considered to be the limit of acceptable delay. The level of service criteria for unsignalized intersections are presented in Table B.

**Table B – Level of Service Criteria for Unsignalized Intersections**

| Control Delay (s/veh) | Level of Service by Volume-to-Capacity Ratio |      |
|-----------------------|----------------------------------------------|------|
|                       | ≤1.0                                         | >1.0 |
| 0 – 10                | A                                            | F    |
| > 10 and ≤ 15         | B                                            | F    |
| > 15 and ≤ 25         | C                                            | F    |
| > 25 and ≤ 35         | D                                            | F    |
| > 35 and ≤ 50         | E                                            | F    |
| > 50                  | F                                            | F    |

*Source: Highway Capacity Manual 2010*

## Appendix C

### Existing Intersection Operational Analysis

Thompson Bridge / Enota Convenience  
1: Thompson Bridge & Walmart/Taco Bell

existing a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |
| Volume (vph)               | 38                                                                                | 0                                                                                 | 64                                                                                | 3                                                                                 | 1                                                                                 | 4                                                                                 | 52                                                                                  | 881                                                                                 | 1                                                                                   | 6                                                                                   | 1877                                                                                | 80                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 50                                                                                |                                                                                   | 0                                                                                 | 50                                                                                |                                                                                   | 0                                                                                 | 200                                                                                 |                                                                                     | 100                                                                                 | 200                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                  |                                                                                     |                                                                                     | 25                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.871                                                                             |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     | 0.994                                                                               |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1787                                                                              | 1599                                                                              | 0                                                                                 | 1787                                                                              | 1639                                                                              | 0                                                                                 | 1787                                                                                | 3539                                                                                | 1599                                                                                | 1787                                                                                | 3519                                                                                | 0                                                                                   |
| Flt Permitted              | 0.753                                                                             |                                                                                   |                                                                                   | 0.538                                                                             |                                                                                   |                                                                                   | 0.056                                                                               |                                                                                     |                                                                                     | 0.304                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1417                                                                              | 1599                                                                              | 0                                                                                 | 1012                                                                              | 1639                                                                              | 0                                                                                 | 105                                                                                 | 3539                                                                                | 1599                                                                                | 572                                                                                 | 3519                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 62                                                                                |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                     |                                                                                     | 34                                                                                  |                                                                                     |                                                                                     | 8                                                                                   |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 30                                                                                  |                                                                                     |                                                                                     |                                                                                     | 30                                                                                  |
| Link Distance (ft)         |                                                                                   | 300                                                                               |                                                                                   |                                                                                   | 195                                                                               |                                                                                   |                                                                                     | 1235                                                                                |                                                                                     |                                                                                     |                                                                                     | 500                                                                                 |
| Travel Time (s)            |                                                                                   | 6.8                                                                               |                                                                                   |                                                                                   | 4.4                                                                               |                                                                                   |                                                                                     | 28.1                                                                                |                                                                                     |                                                                                     |                                                                                     | 11.4                                                                                |
| Peak Hour Factor           | 0.85                                                                              | 0.85                                                                              | 0.85                                                                              | 0.67                                                                              | 0.67                                                                              | 0.67                                                                              | 0.94                                                                                | 0.94                                                                                | 0.94                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                  | 2%                                                                                  | 1%                                                                                  | 1%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 45                                                                                | 0                                                                                 | 75                                                                                | 4                                                                                 | 1                                                                                 | 6                                                                                 | 55                                                                                  | 937                                                                                 | 1                                                                                   | 7                                                                                   | 2086                                                                                | 89                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 45                                                                                | 75                                                                                | 0                                                                                 | 4                                                                                 | 7                                                                                 | 0                                                                                 | 55                                                                                  | 937                                                                                 | 1                                                                                   | 7                                                                                   | 2175                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     |                                                                                     | 12                                                                                  |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     |                                                                                     | 0                                                                                   |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     |                                                                                     | 16                                                                                  |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                  | 100                                                                                 | 20                                                                                  | 20                                                                                  | 100                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                  | 6                                                                                   | 20                                                                                  | 20                                                                                  | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(ft)    |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                     | 94                                                                                  |                                                                                     |                                                                                     |                                                                                     | 94                                                                                  |
| Detector 2 Size(ft)        |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               |                                                                                     | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   | 6                                                                                   |                                                                                     |                                                                                     |



Thompson Bridge / Enota Convenience  
1: Thompson Bridge & Walmart/Taco Bell

existing a.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Detector Phase          | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   | 2                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              |                                                                                   | 20.0                                                                              | 20.0                                                                              |                                                                                   | 8.0                                                                                | 20.0                                                                                | 20.0                                                                                | 8.0                                                                                 | 20.0                                                                                |                                                                                     |
| Total Split (s)         | 20.0                                                                              | 20.0                                                                              |                                                                                   | 20.0                                                                              | 20.0                                                                              |                                                                                   | 12.0                                                                               | 132.0                                                                               | 132.0                                                                               | 8.0                                                                                 | 128.0                                                                               |                                                                                     |
| Total Split (%)         | 12.5%                                                                             | 12.5%                                                                             |                                                                                   | 12.5%                                                                             | 12.5%                                                                             |                                                                                   | 7.5%                                                                               | 82.5%                                                                               | 82.5%                                                                               | 5.0%                                                                                | 80.0%                                                                               |                                                                                     |
| Maximum Green (s)       | 16.0                                                                              | 16.0                                                                              |                                                                                   | 16.0                                                                              | 16.0                                                                              |                                                                                   | 8.0                                                                                | 128.0                                                                               | 128.0                                                                               | 4.0                                                                                 | 124.0                                                                               |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                                | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                                | 0.5                                                                                 | 0.5                                                                                 | 0.5                                                                                 | 0.5                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                                | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                               | C-Max                                                                               | C-Max                                                                               | None                                                                                | C-Max                                                                               |                                                                                     |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                              | 11.0                                                                              |                                                                                   |                                                                                    | 11.0                                                                                | 11.0                                                                                |                                                                                     | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |
| Act Effect Green (s)    | 10.4                                                                              | 10.4                                                                              |                                                                                   | 10.4                                                                              | 10.4                                                                              |                                                                                   | 141.4                                                                              | 139.8                                                                               | 139.8                                                                               | 137.4                                                                               | 133.1                                                                               |                                                                                     |
| Actuated g/C Ratio      | 0.06                                                                              | 0.06                                                                              |                                                                                   | 0.06                                                                              | 0.06                                                                              |                                                                                   | 0.88                                                                               | 0.87                                                                                | 0.87                                                                                | 0.86                                                                                | 0.83                                                                                |                                                                                     |
| v/c Ratio               | 0.49                                                                              | 0.46                                                                              |                                                                                   | 0.06                                                                              | 0.06                                                                              |                                                                                   | 0.35                                                                               | 0.30                                                                                | 0.00                                                                                | 0.01                                                                                | 0.74                                                                                |                                                                                     |
| Control Delay           | 88.6                                                                              | 30.3                                                                              |                                                                                   | 69.7                                                                              | 40.8                                                                              |                                                                                   | 16.2                                                                               | 2.1                                                                                 | 0.0                                                                                 | 1.7                                                                                 | 8.9                                                                                 |                                                                                     |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Delay             | 88.6                                                                              | 30.3                                                                              |                                                                                   | 69.7                                                                              | 40.8                                                                              |                                                                                   | 16.2                                                                               | 2.1                                                                                 | 0.0                                                                                 | 1.7                                                                                 | 8.9                                                                                 |                                                                                     |
| LOS                     | F                                                                                 | C                                                                                 |                                                                                   | E                                                                                 | D                                                                                 |                                                                                   | B                                                                                  | A                                                                                   | A                                                                                   | A                                                                                   | A                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   | 52.2                                                                              |                                                                                   |                                                                                   | 51.3                                                                              |                                                                                   |                                                                                    | 2.8                                                                                 |                                                                                     |                                                                                     | 8.9                                                                                 |                                                                                     |
| Approach LOS            |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 8.8

Intersection LOS: A

Intersection Capacity Utilization 69.9%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: Thompson Bridge & Walmart/Taco Bell

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 s                                                                                 | 132 s                                                                               | 20 s                                                                                | 12 s                                                                                | 128 s                                                                               | 20 s                                                                                | 12 s                                                                                | 128 s                                                                               | 20 s                                                                                | 12 s                                                                                | 128 s                                                                               | 20 s                                                                                | 12 s                                                                                | 128 s                                                                                | 20 s                                                                                  | 12 s                                                                                  | 128 s                                                                                 | 20 s                                                                                  | 12 s                                                                                  | 128 s                                                                                 | 20 s                                                                                  |

# Thompson Bridge / Enota Convenience

## 2: Thompson Bridge & Enota

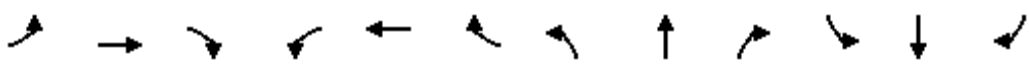
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|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |  |  |  |  |  |  |  |
| Volume (vph)               | 53                                                                                | 51                                                                                | 29                                                                                | 45                                                                                | 27                                                                                | 167                                                                               | 17                                                                                  | 734                                                                                 | 26                                                                                  | 313                                                                                 | 1604                                                                                | 32                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 300                                                                               |                                                                                   | 0                                                                                 | 200                                                                               |                                                                                   | 200                                                                               | 300                                                                                 |                                                                                     | 0                                                                                   | 300                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                  |                                                                                     |                                                                                     | 25                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.945                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     | 0.995                                                                               |                                                                                     |                                                                                     | 0.997                                                                               |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1805                                                                              | 1796                                                                              | 0                                                                                 | 1787                                                                              | 1900                                                                              | 1599                                                                              | 1805                                                                                | 3523                                                                                | 0                                                                                   | 1787                                                                                | 3530                                                                                | 0                                                                                   |
| Flt Permitted              | 0.548                                                                             |                                                                                   |                                                                                   | 0.702                                                                             |                                                                                   |                                                                                   | 0.096                                                                               |                                                                                     |                                                                                     | 0.307                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1041                                                                              | 1796                                                                              | 0                                                                                 | 1321                                                                              | 1900                                                                              | 1599                                                                              | 182                                                                                 | 3523                                                                                | 0                                                                                   | 578                                                                                 | 3530                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 16                                                                                |                                                                                   |                                                                                   |                                                                                   | 188                                                                               |                                                                                     | 3                                                                                   |                                                                                     |                                                                                     | 3                                                                                   |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 30                                                                                  |                                                                                     |                                                                                     | 30                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 160                                                                               |                                                                                   |                                                                                   | 1380                                                                              |                                                                                   |                                                                                     | 173                                                                                 |                                                                                     |                                                                                     | 1235                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 3.6                                                                               |                                                                                   |                                                                                   | 31.4                                                                              |                                                                                   |                                                                                     | 3.9                                                                                 |                                                                                     |                                                                                     | 28.1                                                                                |                                                                                     |
| Peak Hour Factor           | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.94                                                                                | 0.94                                                                                | 0.94                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 1%                                                                                | 0%                                                                                | 1%                                                                                | 0%                                                                                  | 2%                                                                                  | 1%                                                                                  | 1%                                                                                  | 2%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 56                                                                                | 54                                                                                | 31                                                                                | 51                                                                                | 30                                                                                | 188                                                                               | 18                                                                                  | 781                                                                                 | 28                                                                                  | 348                                                                                 | 1782                                                                                | 36                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 56                                                                                | 85                                                                                | 0                                                                                 | 51                                                                                | 30                                                                                | 188                                                                               | 18                                                                                  | 809                                                                                 | 0                                                                                   | 348                                                                                 | 1818                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                | 100                                                                               | 20                                                                                | 20                                                                                  | 100                                                                                 |                                                                                     | 20                                                                                  | 100                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                | 6                                                                                 | 20                                                                                | 20                                                                                  | 6                                                                                   |                                                                                     | 20                                                                                  | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(ft)    |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                     | 94                                                                                  |                                                                                     |                                                                                     | 94                                                                                  |                                                                                     |
| Detector 2 Size(ft)        |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | pm+pt                                                                             | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  |                                                                                     | pm+pt                                                                               | NA                                                                                  |                                                                                     |
| Protected Phases           | 7                                                                                 | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 8                                                                                 | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |

# Thompson Bridge / Enota Convenience

## 2: Thompson Bridge & Enota

existing a.m.

|                         |  |       |     |       |       |       |       |       |     |       |       |     |
|-------------------------|------------------------------------------------------------------------------------|-------|-----|-------|-------|-------|-------|-------|-----|-------|-------|-----|
| Lane Group              | EBL                                                                                | EBT   | EBR | WBL   | WBT   | WBR   | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
| Detector Phase          | 7                                                                                  | 4     |     | 8     | 8     | 8     | 5     | 2     |     | 1     | 6     |     |
| Switch Phase            |                                                                                    |       |     |       |       |       |       |       |     |       |       |     |
| Minimum Initial (s)     | 4.0                                                                                | 4.0   |     | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0   | 4.0   |     |
| Minimum Split (s)       | 8.0                                                                                | 20.0  |     | 20.0  | 20.0  | 20.0  | 8.0   | 20.0  |     | 8.0   | 20.0  |     |
| Total Split (s)         | 9.0                                                                                | 35.0  |     | 26.0  | 26.0  | 26.0  | 8.0   | 84.0  |     | 41.0  | 117.0 |     |
| Total Split (%)         | 5.6%                                                                               | 21.9% |     | 16.3% | 16.3% | 16.3% | 5.0%  | 52.5% |     | 25.6% | 73.1% |     |
| Maximum Green (s)       | 5.0                                                                                | 31.0  |     | 22.0  | 22.0  | 22.0  | 4.0   | 80.0  |     | 37.0  | 113.0 |     |
| Yellow Time (s)         | 3.5                                                                                | 3.5   |     | 3.5   | 3.5   | 3.5   | 3.5   | 3.5   |     | 3.5   | 3.5   |     |
| All-Red Time (s)        | 0.5                                                                                | 0.5   |     | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   |     | 0.5   | 0.5   |     |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Lost Time (s)     | 4.0                                                                                | 4.0   |     | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0   | 4.0   |     |
| Lead/Lag                | Lead                                                                               |       |     | Lag   |       |       | Lead  |       | Lag | Lead  |       | Lag |
| Lead-Lag Optimize?      | Yes                                                                                |       |     | Yes   |       |       | Yes   |       | Yes | Yes   |       | Yes |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode             | None                                                                               | None  |     | None  | None  | None  | None  | C-Max |     | None  | C-Max |     |
| Walk Time (s)           |                                                                                    | 5.0   |     | 5.0   | 5.0   | 5.0   |       | 5.0   |     |       | 5.0   |     |
| Flash Dont Walk (s)     |                                                                                    | 11.0  |     | 11.0  | 11.0  | 11.0  |       | 11.0  |     |       | 11.0  |     |
| Pedestrian Calls (#/hr) |                                                                                    | 0     |     | 0     | 0     | 0     |       | 0     |     |       | 0     |     |
| Act Effect Green (s)    | 18.8                                                                               | 18.8  |     | 11.6  | 11.6  | 11.6  | 122.6 | 116.8 |     | 133.2 | 127.2 |     |
| Actuated g/C Ratio      | 0.12                                                                               | 0.12  |     | 0.07  | 0.07  | 0.07  | 0.77  | 0.73  |     | 0.83  | 0.80  |     |
| v/c Ratio               | 0.38                                                                               | 0.38  |     | 0.54  | 0.22  | 0.65  | 0.09  | 0.31  |     | 0.61  | 0.65  |     |
| Control Delay           | 69.5                                                                               | 55.6  |     | 90.6  | 71.9  | 19.3  | 4.7   | 8.9   |     | 8.0   | 6.1   |     |
| Queue Delay             | 0.0                                                                                | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0   | 0.1   |     |
| Total Delay             | 69.5                                                                               | 55.6  |     | 90.6  | 71.9  | 19.3  | 4.7   | 8.9   |     | 8.0   | 6.1   |     |
| LOS                     | E                                                                                  | E     |     | F     | E     | B     | A     | A     |     | A     | A     |     |
| Approach Delay          |                                                                                    | 61.1  |     |       | 38.7  |       |       | 8.8   |     |       | 6.4   |     |
| Approach LOS            |                                                                                    | E     |     |       | D     |       |       | A     |     |       | A     |     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 41 (26%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 11.8

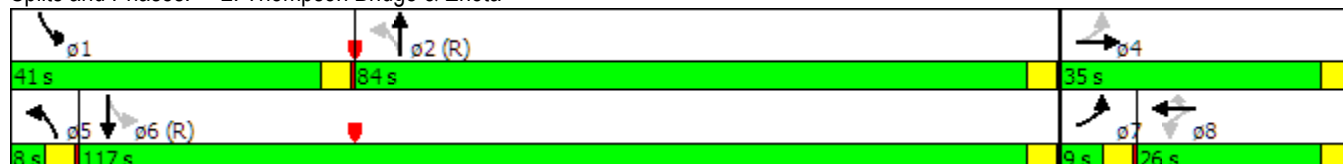
Intersection LOS: B

Intersection Capacity Utilization 68.3%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 2: Thompson Bridge & Enota



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| Intersection              |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Intersection Delay, s/veh | 22.1 |      |      |      |      |      |      |      |      |      |      |      |
| Intersection LOS          | C    |      |      |      |      |      |      |      |      |      |      |      |
| Movement                  | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
| Vol, veh/h                | 0    | 9    | 305  | 7    | 0    | 45   | 200  | 40   | 0    | 9    | 55   | 65   |
| Peak Hour Factor          | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.75 | 0.75 | 0.75 | 0.92 | 0.60 | 0.60 | 0.60 |
| Heavy Vehicles, %         | 2    | 1    | 1    | 1    | 2    | 1    | 1    | 1    | 2    | 1    | 1    | 1    |
| Mvmt Flow                 | 0    | 10   | 332  | 8    | 0    | 60   | 267  | 53   | 0    | 15   | 92   | 108  |
| Number of Lanes           | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB | NB   |
|----------------------------|------|----|------|
| Opposing Approach          | WB   | EB | SB   |
| Opposing Lanes             | 1    | 1  | 1    |
| Conflicting Approach Left  | SB   | NB | EB   |
| Conflicting Lanes Left     | 1    | 1  | 1    |
| Conflicting Approach Right | NB   | SB | WB   |
| Conflicting Lanes Right    | 1    | 1  | 1    |
| HCM Control Delay          | 22.7 | 25 | 15.5 |
| HCM LOS                    | C    | C  | C    |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 7%    | 3%    | 16%   | 50%   |
| Vol Thru, %            | 43%   | 95%   | 70%   | 44%   |
| Vol Right, %           | 50%   | 2%    | 14%   | 6%    |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 129   | 321   | 285   | 275   |
| LT Vol                 | 9     | 9     | 45    | 137   |
| Through Vol            | 55    | 305   | 200   | 122   |
| RT Vol                 | 65    | 7     | 40    | 16    |
| Lane Flow Rate         | 215   | 349   | 380   | 327   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.427 | 0.667 | 0.714 | 0.646 |
| Departure Headway (Hd) | 7.148 | 6.881 | 6.761 | 7.108 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 501   | 523   | 532   | 507   |
| Service Time           | 5.22  | 4.94  | 4.82  | 5.17  |
| HCM Lane V/C Ratio     | 0.429 | 0.667 | 0.714 | 0.645 |
| HCM Control Delay      | 15.5  | 22.7  | 25    | 22.3  |
| HCM Lane LOS           | C     | C     | C     | C     |
| HCM 95th-tile Q        | 2.1   | 4.9   | 5.7   | 4.5   |

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Intersection

Intersection Delay, s/veh

Intersection LOS

| Movement          | SBU  | SBL  | SBT  | SBR  |
|-------------------|------|------|------|------|
| Vol, veh/h        | 0    | 137  | 122  | 16   |
| Peak Hour Factor  | 0.92 | 0.84 | 0.84 | 0.84 |
| Heavy Vehicles, % | 2    | 1    | 1    | 1    |
| Mvmt Flow         | 0    | 163  | 145  | 19   |
| Number of Lanes   | 0    | 0    | 1    | 0    |

Approach SB

|                            |      |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 22.3 |
| HCM LOS                    | C    |

Lane

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# Thompson Bridge / Enota Convenience

## 4: GA 11 Bus & South Enota

existing a.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | NBL                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                               | SBR                                                                               | SEL                                                                                | SET                                                                                 | SER                                                                                 | NWL                                                                                 | NWT                                                                                 | NWR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |  |  |  |
| Volume (vph)               | 12                                                                                | 448                                                                               | 114                                                                               | 245                                                                               | 852                                                                               | 171                                                                               | 272                                                                                | 254                                                                                 | 34                                                                                  | 81                                                                                  | 127                                                                                 | 86                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                               | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 200                                                                               |                                                                                   | 0                                                                                 | 200                                                                               |                                                                                   | 0                                                                                 | 300                                                                                |                                                                                     | 0                                                                                   | 400                                                                                 |                                                                                     | 400                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                 |                                                                                     |                                                                                     | 25                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.970                                                                             |                                                                                   |                                                                                   | 0.975                                                                             |                                                                                   |                                                                                    | 0.982                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1787                                                                              | 1810                                                                              | 0                                                                                 | 1787                                                                              | 1819                                                                              | 0                                                                                 | 1787                                                                               | 1847                                                                                | 0                                                                                   | 1787                                                                                | 1881                                                                                | 1599                                                                                |
| Flt Permitted              | 0.064                                                                             |                                                                                   |                                                                                   | 0.248                                                                             |                                                                                   |                                                                                   | 0.226                                                                              |                                                                                     |                                                                                     | 0.366                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 120                                                                               | 1810                                                                              | 0                                                                                 | 467                                                                               | 1819                                                                              | 0                                                                                 | 425                                                                                | 1847                                                                                | 0                                                                                   | 689                                                                                 | 1881                                                                                | 1599                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 11                                                                                |                                                                                   |                                                                                   | 13                                                                                |                                                                                   |                                                                                    | 4                                                                                   |                                                                                     |                                                                                     |                                                                                     | 116                                                                                 |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 30                                                                                  |                                                                                     |                                                                                     |                                                                                     | 30                                                                                  |
| Link Distance (ft)         |                                                                                   | 494                                                                               |                                                                                   |                                                                                   | 509                                                                               |                                                                                   |                                                                                    | 1007                                                                                |                                                                                     |                                                                                     |                                                                                     | 495                                                                                 |
| Travel Time (s)            |                                                                                   | 11.2                                                                              |                                                                                   |                                                                                   | 11.6                                                                              |                                                                                   |                                                                                    | 22.9                                                                                |                                                                                     |                                                                                     |                                                                                     | 11.3                                                                                |
| Peak Hour Factor           | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.80                                                                               | 0.80                                                                                | 0.80                                                                                | 0.88                                                                                | 0.88                                                                                | 0.88                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 2%                                                                                | 1%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                | 1%                                                                                 | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 13                                                                                | 487                                                                               | 124                                                                               | 266                                                                               | 926                                                                               | 186                                                                               | 340                                                                                | 318                                                                                 | 42                                                                                  | 92                                                                                  | 144                                                                                 | 98                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 13                                                                                | 611                                                                               | 0                                                                                 | 266                                                                               | 1112                                                                              | 0                                                                                 | 340                                                                                | 360                                                                                 | 0                                                                                   | 92                                                                                  | 144                                                                                 | 98                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                               | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                    | 12                                                                                  |                                                                                     |                                                                                     |                                                                                     | 12                                                                                  |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     |                                                                                     | 0                                                                                   |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                    | 16                                                                                  |                                                                                     |                                                                                     |                                                                                     | 16                                                                                  |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                 |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                | Right                                                                               |
| Leading Detector (ft)      | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                 | 100                                                                                 |                                                                                     | 20                                                                                  | 100                                                                                 | 20                                                                                  |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                 | 6                                                                                   |                                                                                     | 20                                                                                  | 6                                                                                   | 20                                                                                  |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(ft)    |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                    | 94                                                                                  |                                                                                     |                                                                                     |                                                                                     | 94                                                                                  |
| Detector 2 Size(ft)        |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                    | 6                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                             | NA                                                                                |                                                                                   | pm+pt                                                                              | NA                                                                                  |                                                                                     | pm+pt                                                                               | NA                                                                                  | Free                                                                                |
| Protected Phases           |                                                                                   | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 |                                                                                   | 7                                                                                  | 4                                                                                   |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     |
| Permitted Phases           | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 4                                                                                  |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     | Free                                                                                |

# Thompson Bridge / Enota Convenience

## 4: GA 11 Bus & South Enota

existing a.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | NBL                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                               | SBR                                                                               | SEL                                                                                | SET                                                                                 | SER                                                                                 | NWL                                                                                 | NWT                                                                                 | NWR                                                                                 |
| Detector Phase          | 2                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 |                                                                                   | 7                                                                                  | 4                                                                                   |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              |                                                                                   | 8.0                                                                               | 20.0                                                                              |                                                                                   | 8.0                                                                                | 20.0                                                                                |                                                                                     | 8.0                                                                                 | 20.0                                                                                |                                                                                     |
| Total Split (s)         | 77.0                                                                              | 77.0                                                                              |                                                                                   | 31.0                                                                              | 108.0                                                                             |                                                                                   | 32.0                                                                               | 42.0                                                                                |                                                                                     | 10.0                                                                                | 20.0                                                                                |                                                                                     |
| Total Split (%)         | 48.1%                                                                             | 48.1%                                                                             |                                                                                   | 19.4%                                                                             | 67.5%                                                                             |                                                                                   | 20.0%                                                                              | 26.3%                                                                               |                                                                                     | 6.3%                                                                                | 12.5%                                                                               |                                                                                     |
| Maximum Green (s)       | 73.0                                                                              | 73.0                                                                              |                                                                                   | 27.0                                                                              | 104.0                                                                             |                                                                                   | 28.0                                                                               | 38.0                                                                                |                                                                                     | 6.0                                                                                 | 16.0                                                                                |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                                | 3.5                                                                                 |                                                                                     | 3.5                                                                                 | 3.5                                                                                 |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                                | 0.5                                                                                 |                                                                                     | 0.5                                                                                 | 0.5                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Lead/Lag                | Lag                                                                               | Lag                                                                               |                                                                                   | Lead                                                                              |                                                                                   |                                                                                   | Lead                                                                               | Lag                                                                                 |                                                                                     | Lead                                                                                | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      | Yes                                                                               | Yes                                                                               |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                                | Yes                                                                                 |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | C-Max                                                                             | C-Max                                                                             |                                                                                   | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                               | None                                                                                |                                                                                     | None                                                                                | None                                                                                |                                                                                     |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              |                                                                                   |                                                                                   | 11.0                                                                              |                                                                                   |                                                                                    | 11.0                                                                                |                                                                                     |                                                                                     | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Act Effect Green (s)    | 85.6                                                                              | 85.6                                                                              |                                                                                   | 105.1                                                                             | 105.1                                                                             |                                                                                   | 46.9                                                                               | 36.9                                                                                |                                                                                     | 21.1                                                                                | 15.1                                                                                | 160.0                                                                               |
| Actuated g/C Ratio      | 0.54                                                                              | 0.54                                                                              |                                                                                   | 0.66                                                                              | 0.66                                                                              |                                                                                   | 0.29                                                                               | 0.23                                                                                |                                                                                     | 0.13                                                                                | 0.09                                                                                | 1.00                                                                                |
| v/c Ratio               | 0.20                                                                              | 0.63                                                                              |                                                                                   | 0.61                                                                              | 0.93                                                                              |                                                                                   | 0.94                                                                               | 0.84                                                                                |                                                                                     | 0.70                                                                                | 0.81                                                                                | 0.06                                                                                |
| Control Delay           | 32.0                                                                              | 30.1                                                                              |                                                                                   | 17.7                                                                              | 38.4                                                                              |                                                                                   | 84.6                                                                               | 75.8                                                                                |                                                                                     | 75.5                                                                                | 102.1                                                                               | 0.1                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 32.0                                                                              | 30.1                                                                              |                                                                                   | 17.7                                                                              | 38.4                                                                              |                                                                                   | 84.6                                                                               | 75.8                                                                                |                                                                                     | 75.5                                                                                | 102.1                                                                               | 0.1                                                                                 |
| LOS                     | C                                                                                 | C                                                                                 |                                                                                   | B                                                                                 | D                                                                                 |                                                                                   | F                                                                                  | E                                                                                   |                                                                                     | E                                                                                   | F                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 30.2                                                                              |                                                                                   |                                                                                   | 34.4                                                                              |                                                                                   |                                                                                    | 80.1                                                                                |                                                                                     |                                                                                     | 64.9                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | F                                                                                   |                                                                                     |                                                                                     | E                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.94

Intersection Signal Delay: 47.4

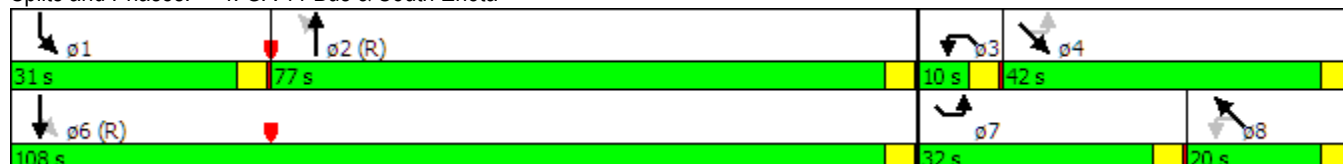
Intersection LOS: D

Intersection Capacity Utilization 93.6%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 4: GA 11 Bus & South Enota



Thompson Bridge / Enota Convenience  
5: Green/Thompson Bridge & Holly & GA 11 Bus

existing a.m.

|                            |  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |                                                                                    |       |                                                                                     |                                                                                     |
|----------------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|------------------------------------------------------------------------------------|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                                | EBR                                                                               | NBL                                                                               | NBT                                                                               | NBR                                                                               | SBL  | SBT                                                                                | SBR   | SWL                                                                                 | SWR                                                                                 |
| Lane Configurations        |                                                                                    |  |  |  |  |      |  |       |  |  |
| Volume (vph)               | 0                                                                                  | 53                                                                                | 19                                                                                | 683                                                                               | 296                                                                               | 0    | 1391                                                                               | 132   | 461                                                                                 | 189                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                               | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900 | 1900                                                                               | 1900  | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 0                                                                                  | 0                                                                                 | 150                                                                               |                                                                                   | 200                                                                               | 0    |                                                                                    | 0     | 0                                                                                   | 0                                                                                   |
| Storage Lanes              | 0                                                                                  | 1                                                                                 | 1                                                                                 |                                                                                   | 2                                                                                 | 0    |                                                                                    | 0     | 2                                                                                   | 0                                                                                   |
| Taper Length (ft)          | 25                                                                                 |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25   |                                                                                    |       | 25                                                                                  |                                                                                     |
| Lane Util. Factor          | 1.00                                                                               | 1.00                                                                              | 1.00                                                                              | 0.95                                                                              | 0.88                                                                              | 1.00 | 0.95                                                                               | 0.95  | 0.97                                                                                | 0.95                                                                                |
| Frt                        |                                                                                    | 0.865                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |      | 0.987                                                                              |       | 0.956                                                                               |                                                                                     |
| Flt Protected              |                                                                                    |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |      |                                                                                    |       | 0.966                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                  | 1644                                                                              | 1805                                                                              | 3539                                                                              | 2814                                                                              | 0    | 3531                                                                               | 0     | 3333                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                    |                                                                                   | 0.086                                                                             |                                                                                   |                                                                                   |      |                                                                                    |       | 0.966                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                  | 1644                                                                              | 163                                                                               | 3539                                                                              | 2814                                                                              | 0    | 3531                                                                               | 0     | 3333                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                    | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |      |                                                                                    | Yes   |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                    | 42                                                                                |                                                                                   |                                                                                   | 333                                                                               |      | 12                                                                                 |       |                                                                                     |                                                                                     |
| Link Speed (mph)           | 30                                                                                 |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |      | 30                                                                                 |       | 30                                                                                  |                                                                                     |
| Link Distance (ft)         | 497                                                                                |                                                                                   |                                                                                   | 707                                                                               |                                                                                   |      | 3085                                                                               |       | 595                                                                                 |                                                                                     |
| Travel Time (s)            | 11.3                                                                               |                                                                                   |                                                                                   | 16.1                                                                              |                                                                                   |      | 70.1                                                                               |       | 13.5                                                                                |                                                                                     |
| Peak Hour Factor           | 0.92                                                                               | 0.83                                                                              | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.92 | 0.89                                                                               | 0.89  | 0.93                                                                                | 0.93                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                 | 0%                                                                                | 0%                                                                                | 2%                                                                                | 1%                                                                                | 0%   | 1%                                                                                 | 0%    | 3%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 0                                                                                  | 64                                                                                | 21                                                                                | 767                                                                               | 333                                                                               | 0    | 1563                                                                               | 148   | 496                                                                                 | 203                                                                                 |
| Shared Lane Traffic (%)    |                                                                                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |                                                                                    |       |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                  | 64                                                                                | 21                                                                                | 767                                                                               | 333                                                                               | 0    | 1711                                                                               | 0     | 699                                                                                 | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                 | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No   | No                                                                                 | No    | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                               | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left | Left                                                                               | Right | Left                                                                                | Right                                                                               |
| Median Width(ft)           | 0                                                                                  |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |      | 12                                                                                 |       | 24                                                                                  |                                                                                     |
| Link Offset(ft)            | 0                                                                                  |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |      | 0                                                                                  |       | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        | 16                                                                                 |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |      | 16                                                                                 |       | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |                                                                                    |       |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                               | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00 | 1.00                                                                               | 1.00  | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                 | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15   |                                                                                    | 9     | 15                                                                                  | 9                                                                                   |
| Number of Detectors        |                                                                                    | 1                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 |      | 2                                                                                  |       | 1                                                                                   |                                                                                     |
| Detector Template          |                                                                                    | Right                                                                             | Left                                                                              | Thru                                                                              | Right                                                                             |      | Thru                                                                               |       | Left                                                                                |                                                                                     |
| Leading Detector (ft)      |                                                                                    | 20                                                                                | 20                                                                                | 100                                                                               | 20                                                                                |      | 100                                                                                |       | 20                                                                                  |                                                                                     |
| Trailing Detector (ft)     |                                                                                    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |      | 0                                                                                  |       | 0                                                                                   |                                                                                     |
| Detector 1 Position(ft)    |                                                                                    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |      | 0                                                                                  |       | 0                                                                                   |                                                                                     |
| Detector 1 Size(ft)        |                                                                                    | 20                                                                                | 20                                                                                | 6                                                                                 | 20                                                                                |      | 6                                                                                  |       | 20                                                                                  |                                                                                     |
| Detector 1 Type            |                                                                                    | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |      | Cl+Ex                                                                              |       | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |                                                                                    |       |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      |                                                                                    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |      | 0.0                                                                                |       | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       |                                                                                    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |      | 0.0                                                                                |       | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       |                                                                                    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |      | 0.0                                                                                |       | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(ft)    |                                                                                    |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |      | 94                                                                                 |       |                                                                                     |                                                                                     |
| Detector 2 Size(ft)        |                                                                                    |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |      | 6                                                                                  |       |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                    |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |      | Cl+Ex                                                                              |       |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |                                                                                    |       |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                    |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |      | 0.0                                                                                |       |                                                                                     |                                                                                     |
| Turn Type                  |                                                                                    | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              |      | NA                                                                                 |       | Prot                                                                                |                                                                                     |
| Protected Phases           |                                                                                    |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |      | 6                                                                                  |       | 8                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                    | 4                                                                                 | 2                                                                                 |                                                                                   | 2                                                                                 |      |                                                                                    |       |                                                                                     |                                                                                     |



Thompson Bridge / Enota Convenience  
5: Green/Thompson Bridge & Holly & GA 11 Bus

existing a.m.



| Lane Group              | EBL | EBR   | NBL   | NBT   | NBR   | SBL | SBT   | SBR | SWL   | SWR |
|-------------------------|-----|-------|-------|-------|-------|-----|-------|-----|-------|-----|
| Detector Phase          |     | 4     | 2     | 2     | 2     |     | 6     |     | 8     |     |
| Switch Phase            |     |       |       |       |       |     |       |     |       |     |
| Minimum Initial (s)     |     | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0   |     | 4.0   |     |
| Minimum Split (s)       |     | 20.0  | 20.0  | 20.0  | 20.0  |     | 20.0  |     | 20.0  |     |
| Total Split (s)         |     | 53.0  | 107.0 | 107.0 | 107.0 |     | 107.0 |     | 53.0  |     |
| Total Split (%)         |     | 33.1% | 66.9% | 66.9% | 66.9% |     | 66.9% |     | 33.1% |     |
| Maximum Green (s)       |     | 49.0  | 103.0 | 103.0 | 103.0 |     | 103.0 |     | 49.0  |     |
| Yellow Time (s)         |     | 3.5   | 3.5   | 3.5   | 3.5   |     | 3.5   |     | 3.5   |     |
| All-Red Time (s)        |     | 0.5   | 0.5   | 0.5   | 0.5   |     | 0.5   |     | 0.5   |     |
| Lost Time Adjust (s)    |     | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0   |     | 0.0   |     |
| Total Lost Time (s)     |     | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0   |     | 4.0   |     |
| Lead/Lag                |     |       |       |       |       |     |       |     |       |     |
| Lead-Lag Optimize?      |     |       |       |       |       |     |       |     |       |     |
| Vehicle Extension (s)   |     | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0   |     | 3.0   |     |
| Recall Mode             |     | None  | C-Max | C-Max | C-Max |     | C-Max |     | None  |     |
| Walk Time (s)           |     | 5.0   | 5.0   | 5.0   | 5.0   |     | 5.0   |     | 5.0   |     |
| Flash Dont Walk (s)     |     | 11.0  | 11.0  | 11.0  | 11.0  |     | 11.0  |     | 11.0  |     |
| Pedestrian Calls (#/hr) |     | 0     | 0     | 0     | 0     |     | 0     |     | 0     |     |
| Act Effect Green (s)    |     | 39.3  | 112.7 | 112.7 | 112.7 |     | 112.7 |     | 39.3  |     |
| Actuated g/C Ratio      |     | 0.25  | 0.70  | 0.70  | 0.70  |     | 0.70  |     | 0.25  |     |
| v/c Ratio               |     | 0.15  | 0.18  | 0.31  | 0.16  |     | 0.69  |     | 0.85  |     |
| Control Delay           |     | 19.2  | 11.6  | 7.8   | 0.3   |     | 16.0  |     | 68.2  |     |
| Queue Delay             |     | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.2   |     | 0.0   |     |
| Total Delay             |     | 19.2  | 11.6  | 7.8   | 0.3   |     | 16.2  |     | 68.2  |     |
| LOS                     |     | B     | B     | A     | A     |     | B     |     | E     |     |
| Approach Delay          |     |       |       | 5.6   |       |     | 16.2  |     | 68.2  |     |
| Approach LOS            |     |       |       | A     |       |     | B     |     | E     |     |

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 23.1

Intersection LOS: C

Intersection Capacity Utilization 68.4%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 5: Green/Thompson Bridge & Holly & GA 11 Bus

|              |             |
|--------------|-------------|
|              |             |
| <p>107 s</p> | <p>53 s</p> |
| <p>107 s</p> | <p>53 s</p> |

## Thompson Bridge / Enota Convenience

## 6: Green &amp; Ridgewood/driveway

existing a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |                                                                                     |  |                                                                                     |                                                                                     |  |                                                                                     |
| Volume (vph)               | 131                                                                               | 5                                                                                 | 22                                                                                | 6                                                                                 | 6                                                                                 | 2                                                                                 | 14                                                                                  | 862                                                                                 | 11                                                                                  | 4                                                                                   | 1798                                                                                | 63                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.981                                                                             |                                                                                   |                                                                                   | 0.981                                                                             |                                                                                   |                                                                                     | 0.998                                                                               |                                                                                     |                                                                                     | 0.995                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.960                                                                             |                                                                                   |                                                                                   | 0.979                                                                             |                                                                                   |                                                                                     | 0.999                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1789                                                                              | 0                                                                                 | 0                                                                                 | 1825                                                                              | 0                                                                                 | 0                                                                                   | 3531                                                                                | 0                                                                                   | 0                                                                                   | 3558                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.775                                                                             |                                                                                   |                                                                                   | 0.906                                                                             |                                                                                   |                                                                                     | 0.873                                                                               |                                                                                     |                                                                                     | 0.954                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1445                                                                              | 0                                                                                 | 0                                                                                 | 1689                                                                              | 0                                                                                 | 0                                                                                   | 3085                                                                                | 0                                                                                   | 0                                                                                   | 3394                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     | 5                                                                                   |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 30                                                                                  |                                                                                     |                                                                                     | 30                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 511                                                                               |                                                                                   |                                                                                   | 308                                                                               |                                                                                   |                                                                                     | 511                                                                                 |                                                                                     |                                                                                     | 707                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 11.6                                                                              |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                     | 11.6                                                                                |                                                                                     |                                                                                     | 16.1                                                                                |                                                                                     |
| Peak Hour Factor           | 0.79                                                                              | 0.79                                                                              | 0.79                                                                              | 0.50                                                                              | 0.50                                                                              | 0.50                                                                              | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                | 0.89                                                                                | 0.89                                                                                | 0.89                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 166                                                                               | 6                                                                                 | 28                                                                                | 12                                                                                | 12                                                                                | 4                                                                                 | 15                                                                                  | 927                                                                                 | 12                                                                                  | 4                                                                                   | 2020                                                                                | 71                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 200                                                                               | 0                                                                                 | 0                                                                                 | 28                                                                                | 0                                                                                 | 0                                                                                   | 954                                                                                 | 0                                                                                   | 0                                                                                   | 2095                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                  | 100                                                                                 |                                                                                     | 20                                                                                  | 100                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                  | 6                                                                                   |                                                                                     | 20                                                                                  | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(ft)    |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                     | 94                                                                                  |                                                                                     |                                                                                     | 94                                                                                  |                                                                                     |
| Detector 2 Size(ft)        |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                 | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |

# Thompson Bridge / Enota Convenience

## 6: Green & Ridgewood/driveway

existing a.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              |                                                                                   | 20.0                                                                              | 20.0                                                                              |                                                                                   | 8.0                                                                                | 20.0                                                                                |                                                                                     | 20.0                                                                                | 20.0                                                                                |                                                                                     |
| Total Split (s)         | 34.0                                                                              | 34.0                                                                              |                                                                                   | 34.0                                                                              | 34.0                                                                              |                                                                                   | 8.0                                                                                | 126.0                                                                               |                                                                                     | 118.0                                                                               | 118.0                                                                               |                                                                                     |
| Total Split (%)         | 21.3%                                                                             | 21.3%                                                                             |                                                                                   | 21.3%                                                                             | 21.3%                                                                             |                                                                                   | 5.0%                                                                               | 78.8%                                                                               |                                                                                     | 73.8%                                                                               | 73.8%                                                                               |                                                                                     |
| Maximum Green (s)       | 30.0                                                                              | 30.0                                                                              |                                                                                   | 30.0                                                                              | 30.0                                                                              |                                                                                   | 4.0                                                                                | 122.0                                                                               |                                                                                     | 114.0                                                                               | 114.0                                                                               |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                                | 3.5                                                                                 |                                                                                     | 3.5                                                                                 | 3.5                                                                                 |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                                | 0.5                                                                                 |                                                                                     | 0.5                                                                                 | 0.5                                                                                 |                                                                                     |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    | 4.0                                                                                 |                                                                                     |                                                                                     | 4.0                                                                                 |                                                                                     |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                                |                                                                                     |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                               | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               |                                                                                     |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                              | 11.0                                                                              |                                                                                   |                                                                                    | 11.0                                                                                |                                                                                     | 11.0                                                                                | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Act Effect Green (s)    |                                                                                   | 25.7                                                                              |                                                                                   |                                                                                   | 25.7                                                                              |                                                                                   |                                                                                    | 126.3                                                                               |                                                                                     |                                                                                     | 126.3                                                                               |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.16                                                                              |                                                                                   |                                                                                   | 0.16                                                                              |                                                                                   |                                                                                    | 0.79                                                                                |                                                                                     |                                                                                     | 0.79                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 0.85                                                                              |                                                                                   |                                                                                   | 0.10                                                                              |                                                                                   |                                                                                    | 0.39                                                                                |                                                                                     |                                                                                     | 0.78                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 92.5                                                                              |                                                                                   |                                                                                   | 49.6                                                                              |                                                                                   |                                                                                    | 6.0                                                                                 |                                                                                     |                                                                                     | 11.9                                                                                |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.2                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 92.5                                                                              |                                                                                   |                                                                                   | 49.6                                                                              |                                                                                   |                                                                                    | 6.0                                                                                 |                                                                                     |                                                                                     | 12.0                                                                                |                                                                                     |
| LOS                     |                                                                                   | F                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   | 92.5                                                                              |                                                                                   |                                                                                   | 49.6                                                                              |                                                                                   |                                                                                    | 6.0                                                                                 |                                                                                     |                                                                                     | 12.0                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | F                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 15.5

Intersection LOS: B

Intersection Capacity Utilization 76.7%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 6: Green & Ridgewood/driveway

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |  |  |  |  |  |
| 126 s                                                                               |                                                                                     |                                                                                     | 34 s                                                                                |                                                                                     |                                                                                     | 34 s                                                                                |                                                                                     |                                                                                     | 34 s                                                                                 |                                                                                       |                                                                                       |
| 8 s                                                                                 |                                                                                     |                                                                                     | 118 s                                                                               |                                                                                     |                                                                                     | 34 s                                                                                |                                                                                     |                                                                                     | 34 s                                                                                 |                                                                                       |                                                                                       |

Thompson Bridge / Enota Convenience  
1: Thompson Bridge & Walmart/Taco Bell

existing p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |
| Volume (vph)               | 71                                                                                | 3                                                                                 | 37                                                                                | 14                                                                                | 2                                                                                 | 25                                                                                | 57                                                                                  | 1973                                                                                | 20                                                                                  | 13                                                                                  | 1101                                                                                | 54                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 50                                                                                |                                                                                   | 0                                                                                 | 50                                                                                |                                                                                   | 0                                                                                 | 200                                                                                 |                                                                                     | 100                                                                                 | 200                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                  |                                                                                     |                                                                                     | 25                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.862                                                                             |                                                                                   |                                                                                   | 0.861                                                                             |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     | 0.993                                                                               |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1787                                                                              | 1622                                                                              | 0                                                                                 | 1787                                                                              | 1620                                                                              | 0                                                                                 | 1787                                                                                | 3539                                                                                | 1599                                                                                | 1787                                                                                | 3516                                                                                | 0                                                                                   |
| Flt Permitted              | 0.705                                                                             |                                                                                   |                                                                                   | 0.710                                                                             |                                                                                   |                                                                                   | 0.205                                                                               |                                                                                     |                                                                                     | 0.061                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1326                                                                              | 1622                                                                              | 0                                                                                 | 1336                                                                              | 1620                                                                              | 0                                                                                 | 386                                                                                 | 3539                                                                                | 1599                                                                                | 115                                                                                 | 3516                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 48                                                                                |                                                                                   |                                                                                   | 49                                                                                |                                                                                   |                                                                                     |                                                                                     | 34                                                                                  |                                                                                     |                                                                                     | 9                                                                                   |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 30                                                                                  |                                                                                     |                                                                                     |                                                                                     | 30                                                                                  |
| Link Distance (ft)         |                                                                                   | 300                                                                               |                                                                                   |                                                                                   | 195                                                                               |                                                                                   |                                                                                     | 1235                                                                                |                                                                                     |                                                                                     |                                                                                     | 500                                                                                 |
| Travel Time (s)            |                                                                                   | 6.8                                                                               |                                                                                   |                                                                                   | 4.4                                                                               |                                                                                   |                                                                                     | 28.1                                                                                |                                                                                     |                                                                                     |                                                                                     | 11.4                                                                                |
| Peak Hour Factor           | 0.77                                                                              | 0.77                                                                              | 0.77                                                                              | 0.51                                                                              | 0.51                                                                              | 0.51                                                                              | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                  | 2%                                                                                  | 1%                                                                                  | 1%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 92                                                                                | 4                                                                                 | 48                                                                                | 27                                                                                | 4                                                                                 | 49                                                                                | 61                                                                                  | 2122                                                                                | 22                                                                                  | 14                                                                                  | 1147                                                                                | 56                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 92                                                                                | 52                                                                                | 0                                                                                 | 27                                                                                | 53                                                                                | 0                                                                                 | 61                                                                                  | 2122                                                                                | 22                                                                                  | 14                                                                                  | 1203                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     |                                                                                     | 12                                                                                  |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     |                                                                                     | 0                                                                                   |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     |                                                                                     | 16                                                                                  |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                  | 100                                                                                 | 20                                                                                  | 20                                                                                  | 100                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                  | 6                                                                                   | 20                                                                                  | 20                                                                                  | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(ft)    |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                     | 94                                                                                  |                                                                                     |                                                                                     |                                                                                     | 94                                                                                  |
| Detector 2 Size(ft)        |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               |                                                                                     | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   | 6                                                                                   |                                                                                     |                                                                                     |

Thompson Bridge / Enota Convenience  
1: Thompson Bridge & Walmart/Taco Bell

existing p.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Detector Phase          | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   | 2                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              |                                                                                   | 20.0                                                                              | 20.0                                                                              |                                                                                   | 8.0                                                                                | 20.0                                                                                | 20.0                                                                                | 8.0                                                                                 | 20.0                                                                                |                                                                                     |
| Total Split (s)         | 25.0                                                                              | 25.0                                                                              |                                                                                   | 25.0                                                                              | 25.0                                                                              |                                                                                   | 8.0                                                                                | 127.0                                                                               | 127.0                                                                               | 8.0                                                                                 | 127.0                                                                               |                                                                                     |
| Total Split (%)         | 15.6%                                                                             | 15.6%                                                                             |                                                                                   | 15.6%                                                                             | 15.6%                                                                             |                                                                                   | 5.0%                                                                               | 79.4%                                                                               | 79.4%                                                                               | 5.0%                                                                                | 79.4%                                                                               |                                                                                     |
| Maximum Green (s)       | 21.0                                                                              | 21.0                                                                              |                                                                                   | 21.0                                                                              | 21.0                                                                              |                                                                                   | 4.0                                                                                | 123.0                                                                               | 123.0                                                                               | 4.0                                                                                 | 123.0                                                                               |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                                | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                                | 0.5                                                                                 | 0.5                                                                                 | 0.5                                                                                 | 0.5                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                                | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                               | C-Max                                                                               | C-Max                                                                               | None                                                                                | C-Max                                                                               |                                                                                     |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                              | 11.0                                                                              |                                                                                   |                                                                                    | 11.0                                                                                | 11.0                                                                                |                                                                                     | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |
| Act Effect Green (s)    | 15.8                                                                              | 15.8                                                                              |                                                                                   | 15.8                                                                              | 15.8                                                                              |                                                                                   | 134.6                                                                              | 132.6                                                                               | 132.6                                                                               | 132.7                                                                               | 128.5                                                                               |                                                                                     |
| Actuated g/C Ratio      | 0.10                                                                              | 0.10                                                                              |                                                                                   | 0.10                                                                              | 0.10                                                                              |                                                                                   | 0.84                                                                               | 0.83                                                                                | 0.83                                                                                | 0.83                                                                                | 0.80                                                                                |                                                                                     |
| v/c Ratio               | 0.70                                                                              | 0.26                                                                              |                                                                                   | 0.21                                                                              | 0.26                                                                              |                                                                                   | 0.16                                                                               | 0.72                                                                                | 0.02                                                                                | 0.09                                                                                | 0.43                                                                                |                                                                                     |
| Control Delay           | 96.4                                                                              | 20.9                                                                              |                                                                                   | 67.9                                                                              | 20.6                                                                              |                                                                                   | 3.8                                                                                | 9.5                                                                                 | 2.1                                                                                 | 3.6                                                                                 | 5.7                                                                                 |                                                                                     |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Delay             | 96.4                                                                              | 20.9                                                                              |                                                                                   | 67.9                                                                              | 20.6                                                                              |                                                                                   | 3.8                                                                                | 9.5                                                                                 | 2.1                                                                                 | 3.6                                                                                 | 5.7                                                                                 |                                                                                     |
| LOS                     | F                                                                                 | C                                                                                 |                                                                                   | E                                                                                 | C                                                                                 |                                                                                   | A                                                                                  | A                                                                                   | A                                                                                   | A                                                                                   | A                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   | 69.1                                                                              |                                                                                   |                                                                                   | 36.5                                                                              |                                                                                   |                                                                                    | 9.3                                                                                 |                                                                                     |                                                                                     | 5.7                                                                                 |                                                                                     |
| Approach LOS            |                                                                                   | E                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.72

Intersection Signal Delay: 11.0

Intersection LOS: B

Intersection Capacity Utilization 71.8%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: Thompson Bridge & Walmart/Taco Bell

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 s                                                                                 | 127 s                                                                               | 25 s                                                                                | 8 s                                                                                 | 127 s                                                                               | 25 s                                                                                | 8 s                                                                                 | 127 s                                                                               | 25 s                                                                                | 8 s                                                                                   | 127 s                                                                                 | 25 s                                                                                  | 8 s                                                                                   | 127 s                                                                                 | 25 s                                                                                  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 s                                                                                 | 127 s                                                                               | 25 s                                                                                | 8 s                                                                                 | 127 s                                                                               | 25 s                                                                                | 8 s                                                                                 | 127 s                                                                               | 25 s                                                                                | 8 s                                                                                   | 127 s                                                                                 | 25 s                                                                                  | 8 s                                                                                   | 127 s                                                                                 | 25 s                                                                                  |

# Thompson Bridge / Enota Convenience

## 2: Thompson Bridge & Enota

existing p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |  |  |  |  |  |  |  |
| Volume (vph)               | 161                                                                               | 82                                                                                | 13                                                                                | 55                                                                                | 51                                                                                | 359                                                                               | 17                                                                                  | 1573                                                                                | 36                                                                                  | 215                                                                                 | 942                                                                                 | 26                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 300                                                                               |                                                                                   | 0                                                                                 | 200                                                                               |                                                                                   | 200                                                                               | 300                                                                                 |                                                                                     | 0                                                                                   | 300                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                  |                                                                                     |                                                                                     | 25                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.980                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     | 0.997                                                                               |                                                                                     |                                                                                     | 0.996                                                                               |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1805                                                                              | 1862                                                                              | 0                                                                                 | 1787                                                                              | 1900                                                                              | 1599                                                                              | 1805                                                                                | 3529                                                                                | 0                                                                                   | 1787                                                                                | 3527                                                                                | 0                                                                                   |
| Flt Permitted              | 0.612                                                                             |                                                                                   |                                                                                   | 0.684                                                                             |                                                                                   |                                                                                   | 0.265                                                                               |                                                                                     |                                                                                     | 0.042                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1163                                                                              | 1862                                                                              | 0                                                                                 | 1287                                                                              | 1900                                                                              | 1599                                                                              | 504                                                                                 | 3529                                                                                | 0                                                                                   | 79                                                                                  | 3527                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   |                                                                                   | 211                                                                               |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     | 3                                                                                   |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 30                                                                                  |                                                                                     |                                                                                     | 30                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 160                                                                               |                                                                                   |                                                                                   | 1380                                                                              |                                                                                   |                                                                                     | 173                                                                                 |                                                                                     |                                                                                     | 1235                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 3.6                                                                               |                                                                                   |                                                                                   | 31.4                                                                              |                                                                                   |                                                                                     | 3.9                                                                                 |                                                                                     |                                                                                     | 28.1                                                                                |                                                                                     |
| Peak Hour Factor           | 0.84                                                                              | 0.84                                                                              | 0.84                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 1%                                                                                | 0%                                                                                | 1%                                                                                | 0%                                                                                  | 2%                                                                                  | 1%                                                                                  | 1%                                                                                  | 2%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 192                                                                               | 98                                                                                | 15                                                                                | 61                                                                                | 57                                                                                | 399                                                                               | 18                                                                                  | 1691                                                                                | 39                                                                                  | 234                                                                                 | 1024                                                                                | 28                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 192                                                                               | 113                                                                               | 0                                                                                 | 61                                                                                | 57                                                                                | 399                                                                               | 18                                                                                  | 1730                                                                                | 0                                                                                   | 234                                                                                 | 1052                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                | 100                                                                               | 20                                                                                | 20                                                                                  | 100                                                                                 |                                                                                     | 20                                                                                  | 100                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                | 6                                                                                 | 20                                                                                | 20                                                                                  | 6                                                                                   |                                                                                     | 20                                                                                  | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(ft)    |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                     | 94                                                                                  |                                                                                     |                                                                                     | 94                                                                                  |                                                                                     |
| Detector 2 Size(ft)        |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | pm+pt                                                                             | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  |                                                                                     | pm+pt                                                                               | NA                                                                                  |                                                                                     |
| Protected Phases           | 7                                                                                 | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 8                                                                                 | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |

# Thompson Bridge / Enota Convenience

## 2: Thompson Bridge & Enota

existing p.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Detector Phase          | 7                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 | 8                                                                                 | 5                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Minimum Split (s)       | 8.0                                                                               | 20.0                                                                              |                                                                                   | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 8.0                                                                                | 20.0                                                                                |                                                                                     | 8.0                                                                                 | 20.0                                                                                |                                                                                     |
| Total Split (s)         | 12.0                                                                              | 47.0                                                                              |                                                                                   | 35.0                                                                              | 35.0                                                                              | 35.0                                                                              | 8.0                                                                                | 87.0                                                                                |                                                                                     | 26.0                                                                                | 105.0                                                                               |                                                                                     |
| Total Split (%)         | 7.5%                                                                              | 29.4%                                                                             |                                                                                   | 21.9%                                                                             | 21.9%                                                                             | 21.9%                                                                             | 5.0%                                                                               | 54.4%                                                                               |                                                                                     | 16.3%                                                                               | 65.6%                                                                               |                                                                                     |
| Maximum Green (s)       | 8.0                                                                               | 43.0                                                                              |                                                                                   | 31.0                                                                              | 31.0                                                                              | 31.0                                                                              | 4.0                                                                                | 83.0                                                                                |                                                                                     | 22.0                                                                                | 101.0                                                                               |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                                | 3.5                                                                                 |                                                                                     | 3.5                                                                                 | 3.5                                                                                 |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                                | 0.5                                                                                 |                                                                                     | 0.5                                                                                 | 0.5                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Lead/Lag                | Lead                                                                              |                                                                                   |                                                                                   | Lag                                                                               |                                                                                   |                                                                                   | Lead                                                                               |                                                                                     | Lag                                                                                 | Lead                                                                                |                                                                                     | Lag                                                                                 |
| Lead-Lag Optimize?      | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                                |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     | Yes                                                                                 |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              | None                                                                              | None                                                                               | C-Max                                                                               |                                                                                     | None                                                                                | C-Max                                                                               |                                                                                     |
| Walk Time (s)           |                                                                                   | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   | 11.0                                                                              |                                                                                   | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              |                                                                                    | 11.0                                                                                |                                                                                     |                                                                                     | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Act Effect Green (s)    | 37.4                                                                              | 37.4                                                                              |                                                                                   | 25.4                                                                              | 25.4                                                                              | 25.4                                                                              | 95.9                                                                               | 90.9                                                                                |                                                                                     | 114.6                                                                               | 109.4                                                                               |                                                                                     |
| Actuated g/C Ratio      | 0.23                                                                              | 0.23                                                                              |                                                                                   | 0.16                                                                              | 0.16                                                                              | 0.16                                                                              | 0.60                                                                               | 0.57                                                                                |                                                                                     | 0.72                                                                                | 0.68                                                                                |                                                                                     |
| v/c Ratio               | 0.63                                                                              | 0.26                                                                              |                                                                                   | 0.30                                                                              | 0.19                                                                              | 0.93                                                                              | 0.05                                                                               | 0.86                                                                                |                                                                                     | 0.88                                                                                | 0.44                                                                                |                                                                                     |
| Control Delay           | 62.4                                                                              | 47.7                                                                              |                                                                                   | 61.2                                                                              | 57.5                                                                              | 58.5                                                                              | 9.8                                                                                | 36.5                                                                                |                                                                                     | 89.2                                                                                | 9.6                                                                                 |                                                                                     |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Delay             | 62.4                                                                              | 47.7                                                                              |                                                                                   | 61.2                                                                              | 57.5                                                                              | 58.5                                                                              | 9.8                                                                                | 36.5                                                                                |                                                                                     | 89.2                                                                                | 9.6                                                                                 |                                                                                     |
| LOS                     | E                                                                                 | D                                                                                 |                                                                                   | E                                                                                 | E                                                                                 | E                                                                                 | A                                                                                  | D                                                                                   |                                                                                     | F                                                                                   | A                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   | 56.9                                                                              |                                                                                   |                                                                                   | 58.7                                                                              |                                                                                   |                                                                                    | 36.2                                                                                |                                                                                     |                                                                                     | 24.1                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | E                                                                                 |                                                                                   |                                                                                   | E                                                                                 |                                                                                   |                                                                                    | D                                                                                   |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 41 (26%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 36.8

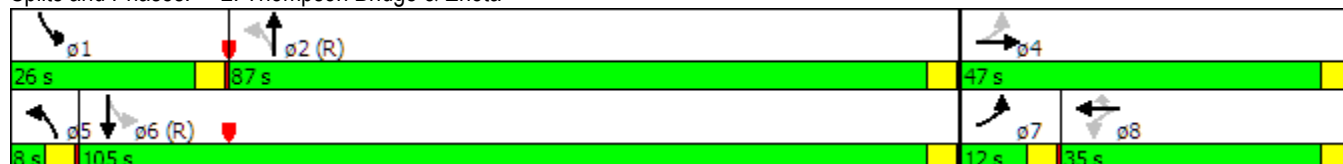
Intersection LOS: D

Intersection Capacity Utilization 85.8%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 2: Thompson Bridge & Enota



Thompson Bridge / Enota Convenience  
3: Riverside & Enota

existing p.m.

| Intersection              |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Intersection Delay, s/veh | 58.5 |      |      |      |      |      |      |      |      |      |      |      |
| Intersection LOS          | F    |      |      |      |      |      |      |      |      |      |      |      |
| Movement                  | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
| Vol, veh/h                | 0    | 67   | 306  | 10   | 0    | 26   | 312  | 109  | 0    | 22   | 342  | 37   |
| Peak Hour Factor          | 0.92 | 0.91 | 0.91 | 0.91 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles, %         | 2    | 1    | 1    | 1    | 2    | 1    | 1    | 1    | 2    | 1    | 1    | 1    |
| Mvmt Flow                 | 0    | 74   | 336  | 11   | 0    | 28   | 339  | 118  | 0    | 23   | 360  | 39   |
| Number of Lanes           | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB   | NB   |
|----------------------------|------|------|------|
| Opposing Approach          | WB   | EB   | SB   |
| Opposing Lanes             | 1    | 1    | 1    |
| Conflicting Approach Left  | SB   | NB   | EB   |
| Conflicting Lanes Left     | 1    | 1    | 1    |
| Conflicting Approach Right | NB   | SB   | WB   |
| Conflicting Lanes Right    | 1    | 1    | 1    |
| HCM Control Delay          | 59.9 | 71.3 | 59.3 |
| HCM LOS                    | F    | F    | F    |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 5%    | 17%   | 6%    | 38%   |
| Vol Thru, %            | 85%   | 80%   | 70%   | 43%   |
| Vol Right, %           | 9%    | 3%    | 24%   | 19%   |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 401   | 383   | 447   | 154   |
| LT Vol                 | 22    | 67    | 26    | 59    |
| Through Vol            | 342   | 306   | 312   | 66    |
| RT Vol                 | 37    | 10    | 109   | 29    |
| Lane Flow Rate         | 422   | 421   | 486   | 188   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.947 | 0.949 | 1     | 0.482 |
| Departure Headway (Hd) | 8.073 | 8.114 | 7.969 | 9.241 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 447   | 446   | 452   | 389   |
| Service Time           | 6.132 | 6.172 | 6.06  | 7.32  |
| HCM Lane V/C Ratio     | 0.944 | 0.944 | 1.075 | 0.483 |
| HCM Control Delay      | 59.3  | 59.9  | 71.3  | 20.7  |
| HCM Lane LOS           | F     | F     | F     | C     |
| HCM 95th-tile Q        | 11.2  | 11.2  | 12.9  | 2.5   |



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**Intersection**

Intersection Delay, s/veh

Intersection LOS

| Movement          | SBU  | SBL  | SBT  | SBR  |
|-------------------|------|------|------|------|
| Vol, veh/h        | 0    | 59   | 66   | 29   |
| Peak Hour Factor  | 0.92 | 0.82 | 0.82 | 0.82 |
| Heavy Vehicles, % | 2    | 1    | 1    | 1    |
| Mvmt Flow         | 0    | 72   | 80   | 35   |
| Number of Lanes   | 0    | 0    | 1    | 0    |

|                            |           |
|----------------------------|-----------|
| <b>Approach</b>            | <b>SB</b> |
| Opposing Approach          | NB        |
| Opposing Lanes             | 1         |
| Conflicting Approach Left  | WB        |
| Conflicting Lanes Left     | 1         |
| Conflicting Approach Right | EB        |
| Conflicting Lanes Right    | 1         |
| HCM Control Delay          | 20.7      |
| HCM LOS                    | C         |

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**Lane**

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# Thompson Bridge / Enota Convenience

## 4: GA 11 Bus & South Enota

existing p.m.

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | NBL                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                               | SBR                                                                               | SEL                                                                                | SET                                                                                 | SER                                                                                 | NWL                                                                                 | NWT                                                                                 | NWR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |  |  |  |
| Volume (vph)               | 17                                                                                | 584                                                                               | 48                                                                                | 106                                                                               | 579                                                                               | 250                                                                               | 231                                                                                | 142                                                                                 | 28                                                                                  | 237                                                                                 | 341                                                                                 | 354                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                               | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 200                                                                               |                                                                                   | 0                                                                                 | 200                                                                               |                                                                                   | 0                                                                                 | 300                                                                                |                                                                                     | 0                                                                                   | 400                                                                                 |                                                                                     | 400                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                 |                                                                                     |                                                                                     | 25                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.989                                                                             |                                                                                   |                                                                                   | 0.955                                                                             |                                                                                   |                                                                                    | 0.975                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1787                                                                              | 1844                                                                              | 0                                                                                 | 1787                                                                              | 1784                                                                              | 0                                                                                 | 1787                                                                               | 1834                                                                                | 0                                                                                   | 1787                                                                                | 1881                                                                                | 1599                                                                                |
| Flt Permitted              | 0.083                                                                             |                                                                                   |                                                                                   | 0.148                                                                             |                                                                                   |                                                                                   | 0.105                                                                              |                                                                                     |                                                                                     | 0.456                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 156                                                                               | 1844                                                                              | 0                                                                                 | 278                                                                               | 1784                                                                              | 0                                                                                 | 198                                                                                | 1834                                                                                | 0                                                                                   | 858                                                                                 | 1881                                                                                | 1599                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 22                                                                                |                                                                                   |                                                                                    | 6                                                                                   |                                                                                     |                                                                                     |                                                                                     | 396                                                                                 |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 30                                                                                  |                                                                                     |                                                                                     |                                                                                     | 30                                                                                  |
| Link Distance (ft)         |                                                                                   | 494                                                                               |                                                                                   |                                                                                   | 509                                                                               |                                                                                   |                                                                                    | 1007                                                                                |                                                                                     |                                                                                     |                                                                                     | 495                                                                                 |
| Travel Time (s)            |                                                                                   | 11.2                                                                              |                                                                                   |                                                                                   | 11.6                                                                              |                                                                                   |                                                                                    | 22.9                                                                                |                                                                                     |                                                                                     |                                                                                     | 11.3                                                                                |
| Peak Hour Factor           | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.80                                                                               | 0.80                                                                                | 0.80                                                                                | 0.88                                                                                | 0.88                                                                                | 0.88                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 2%                                                                                | 1%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                | 1%                                                                                 | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 19                                                                                | 642                                                                               | 53                                                                                | 119                                                                               | 651                                                                               | 281                                                                               | 289                                                                                | 178                                                                                 | 35                                                                                  | 269                                                                                 | 388                                                                                 | 402                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 19                                                                                | 695                                                                               | 0                                                                                 | 119                                                                               | 932                                                                               | 0                                                                                 | 289                                                                                | 213                                                                                 | 0                                                                                   | 269                                                                                 | 388                                                                                 | 402                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                               | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                    | 12                                                                                  |                                                                                     |                                                                                     |                                                                                     | 12                                                                                  |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     |                                                                                     | 0                                                                                   |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                    | 16                                                                                  |                                                                                     |                                                                                     |                                                                                     | 16                                                                                  |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                 |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                | Right                                                                               |
| Leading Detector (ft)      | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                 | 100                                                                                 |                                                                                     | 20                                                                                  | 100                                                                                 | 20                                                                                  |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                 | 6                                                                                   |                                                                                     | 20                                                                                  | 6                                                                                   | 20                                                                                  |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(ft)    |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                    | 94                                                                                  |                                                                                     |                                                                                     |                                                                                     | 94                                                                                  |
| Detector 2 Size(ft)        |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                    | 6                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                             | NA                                                                                |                                                                                   | pm+pt                                                                              | NA                                                                                  |                                                                                     | pm+pt                                                                               | NA                                                                                  | Free                                                                                |
| Protected Phases           |                                                                                   | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 |                                                                                   | 7                                                                                  | 4                                                                                   |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     |
| Permitted Phases           | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 4                                                                                  |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     | Free                                                                                |

# Thompson Bridge / Enota Convenience

## 4: GA 11 Bus & South Enota

existing p.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | NBL                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                               | SBR                                                                               | SEL                                                                                | SET                                                                                 | SER                                                                                 | NWL                                                                                 | NWT                                                                                 | NWR                                                                                 |
| Detector Phase          | 2                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 |                                                                                   | 7                                                                                  | 4                                                                                   |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              |                                                                                   | 8.0                                                                               | 20.0                                                                              |                                                                                   | 8.0                                                                                | 20.0                                                                                |                                                                                     | 8.0                                                                                 | 20.0                                                                                |                                                                                     |
| Total Split (s)         | 80.0                                                                              | 80.0                                                                              |                                                                                   | 13.0                                                                              | 93.0                                                                              |                                                                                   | 26.0                                                                               | 43.0                                                                                |                                                                                     | 24.0                                                                                | 41.0                                                                                |                                                                                     |
| Total Split (%)         | 50.0%                                                                             | 50.0%                                                                             |                                                                                   | 8.1%                                                                              | 58.1%                                                                             |                                                                                   | 16.3%                                                                              | 26.9%                                                                               |                                                                                     | 15.0%                                                                               | 25.6%                                                                               |                                                                                     |
| Maximum Green (s)       | 76.0                                                                              | 76.0                                                                              |                                                                                   | 9.0                                                                               | 89.0                                                                              |                                                                                   | 22.0                                                                               | 39.0                                                                                |                                                                                     | 20.0                                                                                | 37.0                                                                                |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                                | 3.5                                                                                 |                                                                                     | 3.5                                                                                 | 3.5                                                                                 |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                                | 0.5                                                                                 |                                                                                     | 0.5                                                                                 | 0.5                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Lead/Lag                | Lag                                                                               | Lag                                                                               |                                                                                   | Lead                                                                              |                                                                                   |                                                                                   | Lead                                                                               | Lag                                                                                 |                                                                                     | Lead                                                                                | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      | Yes                                                                               | Yes                                                                               |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                                | Yes                                                                                 |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | C-Max                                                                             | C-Max                                                                             |                                                                                   | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                               | None                                                                                |                                                                                     | None                                                                                | None                                                                                |                                                                                     |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              |                                                                                   |                                                                                   | 11.0                                                                              |                                                                                   |                                                                                    | 11.0                                                                                |                                                                                     |                                                                                     | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Act Effect Green (s)    | 77.8                                                                              | 77.8                                                                              |                                                                                   | 90.6                                                                              | 90.6                                                                              |                                                                                   | 59.9                                                                               | 38.2                                                                                |                                                                                     | 54.7                                                                                | 35.4                                                                                | 160.0                                                                               |
| Actuated g/C Ratio      | 0.49                                                                              | 0.49                                                                              |                                                                                   | 0.57                                                                              | 0.57                                                                              |                                                                                   | 0.37                                                                               | 0.24                                                                                |                                                                                     | 0.34                                                                                | 0.22                                                                                | 1.00                                                                                |
| v/c Ratio               | 0.25                                                                              | 0.77                                                                              |                                                                                   | 0.50                                                                              | 0.91                                                                              |                                                                                   | 0.99                                                                               | 0.48                                                                                |                                                                                     | 0.67                                                                                | 0.93                                                                                | 0.25                                                                                |
| Control Delay           | 36.1                                                                              | 41.4                                                                              |                                                                                   | 23.9                                                                              | 45.3                                                                              |                                                                                   | 97.1                                                                               | 54.9                                                                                |                                                                                     | 44.9                                                                                | 90.6                                                                                | 0.4                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 36.1                                                                              | 41.4                                                                              |                                                                                   | 23.9                                                                              | 45.3                                                                              |                                                                                   | 97.1                                                                               | 54.9                                                                                |                                                                                     | 44.9                                                                                | 90.6                                                                                | 0.4                                                                                 |
| LOS                     | D                                                                                 | D                                                                                 |                                                                                   | C                                                                                 | D                                                                                 |                                                                                   | F                                                                                  | D                                                                                   |                                                                                     | D                                                                                   | F                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 41.2                                                                              |                                                                                   |                                                                                   | 42.9                                                                              |                                                                                   |                                                                                    | 79.2                                                                                |                                                                                     |                                                                                     | 44.7                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | E                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.99

Intersection Signal Delay: 48.6

Intersection LOS: D

Intersection Capacity Utilization 93.1%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 4: GA 11 Bus & South Enota

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| 13 s                                                                                | 80 s                                                                                |                                                                                     | 24 s                                                                                | 43 s                                                                                 |                                                                                       |
|  |  |  |  |  |  |
| 93 s                                                                                |                                                                                     |                                                                                     | 26 s                                                                                | 41 s                                                                                 |                                                                                       |

Thompson Bridge / Enota Convenience  
5: Green/Thompson Bridge & Holly & GA 11 Bus

existing p.m.

|                            |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBR                                                                               | NBL                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                                | SBR                                                                                 | SWL                                                                                 | SWR                                                                                 |
| Lane Configurations        |                                                                                   |  |  |  |  |                                                                                   |  |                                                                                     |  |  |
| Volume (vph)               | 0                                                                                 | 35                                                                                | 46                                                                                | 1412                                                                              | 653                                                                               | 0                                                                                 | 812                                                                                | 125                                                                                 | 387                                                                                 | 218                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                               | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 0                                                                                 | 0                                                                                 | 150                                                                               |                                                                                   | 200                                                                               | 0                                                                                 |                                                                                    | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Lanes              | 0                                                                                 | 1                                                                                 | 1                                                                                 |                                                                                   | 2                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   | 2                                                                                   | 0                                                                                   |
| Taper Length (ft)          | 25                                                                                |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                    |                                                                                     | 25                                                                                  |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                              | 0.88                                                                              | 1.00                                                                              | 0.95                                                                               | 0.95                                                                                | 0.97                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.865                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   | 0.980                                                                              |                                                                                     | 0.946                                                                               |                                                                                     |
| Flt Protected              |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     | 0.969                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1644                                                                              | 1805                                                                              | 3574                                                                              | 2814                                                                              | 0                                                                                 | 3507                                                                               | 0                                                                                   | 3357                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   |                                                                                   | 0.225                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     | 0.969                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1644                                                                              | 428                                                                               | 3574                                                                              | 2814                                                                              | 0                                                                                 | 3507                                                                               | 0                                                                                   | 3357                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 156                                                                               |                                                                                   |                                                                                   | 482                                                                               |                                                                                   | 21                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)           | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                 |                                                                                     | 30                                                                                  |                                                                                     |
| Link Distance (ft)         | 497                                                                               |                                                                                   |                                                                                   | 707                                                                               |                                                                                   |                                                                                   | 3085                                                                               |                                                                                     | 595                                                                                 |                                                                                     |
| Travel Time (s)            | 11.3                                                                              |                                                                                   |                                                                                   | 16.1                                                                              |                                                                                   |                                                                                   | 70.1                                                                               |                                                                                     | 13.5                                                                                |                                                                                     |
| Peak Hour Factor           | 0.92                                                                              | 0.58                                                                              | 0.93                                                                              | 0.93                                                                              | 0.93                                                                              | 0.92                                                                              | 0.87                                                                               | 0.87                                                                                | 0.88                                                                                | 0.88                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 1%                                                                                | 1%                                                                                | 0%                                                                                | 1%                                                                                 | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 0                                                                                 | 60                                                                                | 49                                                                                | 1518                                                                              | 702                                                                               | 0                                                                                 | 933                                                                                | 144                                                                                 | 440                                                                                 | 248                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 60                                                                                | 49                                                                                | 1518                                                                              | 702                                                                               | 0                                                                                 | 1077                                                                               | 0                                                                                   | 688                                                                                 | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                               | Right                                                                               | Left                                                                                | Right                                                                               |
| Median Width(ft)           | 0                                                                                 |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                 |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                  |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                 |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                    | 9                                                                                   | 15                                                                                  | 9                                                                                   |
| Number of Detectors        |                                                                                   | 1                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 |                                                                                   | 2                                                                                  |                                                                                     | 1                                                                                   |                                                                                     |
| Detector Template          |                                                                                   | Right                                                                             | Left                                                                              | Thru                                                                              | Right                                                                             |                                                                                   | Thru                                                                               |                                                                                     | Left                                                                                |                                                                                     |
| Leading Detector (ft)      |                                                                                   | 20                                                                                | 20                                                                                | 100                                                                               | 20                                                                                |                                                                                   | 100                                                                                |                                                                                     | 20                                                                                  |                                                                                     |
| Trailing Detector (ft)     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  |                                                                                     | 0                                                                                   |                                                                                     |
| Detector 1 Position(ft)    |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  |                                                                                     | 0                                                                                   |                                                                                     |
| Detector 1 Size(ft)        |                                                                                   | 20                                                                                | 20                                                                                | 6                                                                                 | 20                                                                                |                                                                                   | 6                                                                                  |                                                                                     | 20                                                                                  |                                                                                     |
| Detector 1 Type            |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                |                                                                                     | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                |                                                                                     | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                |                                                                                     | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(ft)    |                                                                                   |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Size(ft)        |                                                                                   |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                  |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                              |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Turn Type                  |                                                                                   | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              |                                                                                   | NA                                                                                 |                                                                                     | Prot                                                                                |                                                                                     |
| Protected Phases           |                                                                                   |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                  |                                                                                     | 8                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   | 4                                                                                 | 2                                                                                 |                                                                                   | 2                                                                                 |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |

Thompson Bridge / Enota Convenience  
5: Green/Thompson Bridge & Holly & GA 11 Bus

existing p.m.



| Lane Group              | EBL | EBR   | NBL   | NBT   | NBR   | SBL | SBT   | SBR | SWL   | SWR |
|-------------------------|-----|-------|-------|-------|-------|-----|-------|-----|-------|-----|
| Detector Phase          |     | 4     | 2     | 2     | 2     |     | 6     |     | 8     |     |
| Switch Phase            |     |       |       |       |       |     |       |     |       |     |
| Minimum Initial (s)     |     | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0   |     | 4.0   |     |
| Minimum Split (s)       |     | 20.0  | 20.0  | 20.0  | 20.0  |     | 20.0  |     | 20.0  |     |
| Total Split (s)         |     | 55.0  | 105.0 | 105.0 | 105.0 |     | 105.0 |     | 55.0  |     |
| Total Split (%)         |     | 34.4% | 65.6% | 65.6% | 65.6% |     | 65.6% |     | 34.4% |     |
| Maximum Green (s)       |     | 51.0  | 101.0 | 101.0 | 101.0 |     | 101.0 |     | 51.0  |     |
| Yellow Time (s)         |     | 3.5   | 3.5   | 3.5   | 3.5   |     | 3.5   |     | 3.5   |     |
| All-Red Time (s)        |     | 0.5   | 0.5   | 0.5   | 0.5   |     | 0.5   |     | 0.5   |     |
| Lost Time Adjust (s)    |     | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0   |     | 0.0   |     |
| Total Lost Time (s)     |     | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0   |     | 4.0   |     |
| Lead/Lag                |     |       |       |       |       |     |       |     |       |     |
| Lead-Lag Optimize?      |     |       |       |       |       |     |       |     |       |     |
| Vehicle Extension (s)   |     | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0   |     | 3.0   |     |
| Recall Mode             |     | None  | C-Max | C-Max | C-Max |     | C-Max |     | None  |     |
| Walk Time (s)           |     | 5.0   | 5.0   | 5.0   | 5.0   |     | 5.0   |     | 5.0   |     |
| Flash Dont Walk (s)     |     | 11.0  | 11.0  | 11.0  | 11.0  |     | 11.0  |     | 11.0  |     |
| Pedestrian Calls (#/hr) |     | 0     | 0     | 0     | 0     |     | 0     |     | 0     |     |
| Act Effect Green (s)    |     | 38.7  | 113.3 | 113.3 | 113.3 |     | 113.3 |     | 38.7  |     |
| Actuated g/C Ratio      |     | 0.24  | 0.71  | 0.71  | 0.71  |     | 0.71  |     | 0.24  |     |
| v/c Ratio               |     | 0.12  | 0.16  | 0.60  | 0.33  |     | 0.43  |     | 0.85  |     |
| Control Delay           |     | 0.5   | 7.4   | 7.8   | 1.2   |     | 10.8  |     | 68.1  |     |
| Queue Delay             |     | 0.0   | 0.0   | 0.6   | 0.0   |     | 0.0   |     | 0.0   |     |
| Total Delay             |     | 0.5   | 7.4   | 8.4   | 1.2   |     | 10.8  |     | 68.1  |     |
| LOS                     |     | A     | A     | A     | A     |     | B     |     | E     |     |
| Approach Delay          |     |       |       | 6.1   |       |     | 10.8  |     | 68.1  |     |
| Approach LOS            |     |       |       | A     |       |     | B     |     | E     |     |

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 17.7

Intersection LOS: B

Intersection Capacity Utilization 63.6%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 5: Green/Thompson Bridge & Holly & GA 11 Bus

|               |           |
|---------------|-----------|
| <p>ø2 (R)</p> | <p>ø4</p> |
| 105 s         | 55 s      |
| <p>ø6 (R)</p> | <p>ø8</p> |
| 105 s         | 55 s      |

# Thompson Bridge / Enota Convenience

## 6: Green & Ridgewood/driveway

existing p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |                                                                                     |  |                                                                                     |                                                                                     |  |                                                                                     |
| Volume (vph)               | 252                                                                               | 8                                                                                 | 20                                                                                | 11                                                                                | 14                                                                                | 5                                                                                 | 23                                                                                  | 1849                                                                                | 10                                                                                  | 0                                                                                   | 1097                                                                                | 73                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.990                                                                             |                                                                                   |                                                                                   | 0.979                                                                             |                                                                                   |                                                                                     | 0.999                                                                               |                                                                                     |                                                                                     | 0.991                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.957                                                                             |                                                                                   |                                                                                   | 0.982                                                                             |                                                                                   |                                                                                     | 0.999                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1800                                                                              | 0                                                                                 | 0                                                                                 | 1827                                                                              | 0                                                                                 | 0                                                                                   | 3568                                                                                | 0                                                                                   | 0                                                                                   | 3544                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.729                                                                             |                                                                                   |                                                                                   | 0.894                                                                             |                                                                                   |                                                                                     | 0.911                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1371                                                                              | 0                                                                                 | 0                                                                                 | 1663                                                                              | 0                                                                                 | 0                                                                                   | 3253                                                                                | 0                                                                                   | 0                                                                                   | 3544                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 30                                                                                  |                                                                                     |                                                                                     | 30                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 511                                                                               |                                                                                   |                                                                                   | 308                                                                               |                                                                                   |                                                                                     | 511                                                                                 |                                                                                     |                                                                                     | 707                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 11.6                                                                              |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                     | 11.6                                                                                |                                                                                     |                                                                                     | 16.1                                                                                |                                                                                     |
| Peak Hour Factor           | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.68                                                                              | 0.68                                                                              | 0.68                                                                              | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.89                                                                                | 0.89                                                                                | 0.89                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 277                                                                               | 9                                                                                 | 22                                                                                | 16                                                                                | 21                                                                                | 7                                                                                 | 25                                                                                  | 2010                                                                                | 11                                                                                  | 0                                                                                   | 1233                                                                                | 82                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 308                                                                               | 0                                                                                 | 0                                                                                 | 44                                                                                | 0                                                                                 | 0                                                                                   | 2046                                                                                | 0                                                                                   | 0                                                                                   | 1315                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                  | 100                                                                                 |                                                                                     | 20                                                                                  | 100                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                  | 6                                                                                   |                                                                                     | 20                                                                                  | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(ft)    |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                     | 94                                                                                  |                                                                                     |                                                                                     | 94                                                                                  |                                                                                     |
| Detector 2 Size(ft)        |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     |                                                                                     | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                 | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |

# Thompson Bridge / Enota Convenience

## 6: Green & Ridgewood/driveway

existing p.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              |                                                                                   | 20.0                                                                              | 20.0                                                                              |                                                                                   | 8.0                                                                                | 20.0                                                                                |                                                                                     | 20.0                                                                                | 20.0                                                                                |                                                                                     |
| Total Split (s)         | 45.0                                                                              | 45.0                                                                              |                                                                                   | 45.0                                                                              | 45.0                                                                              |                                                                                   | 8.0                                                                                | 115.0                                                                               |                                                                                     | 107.0                                                                               | 107.0                                                                               |                                                                                     |
| Total Split (%)         | 28.1%                                                                             | 28.1%                                                                             |                                                                                   | 28.1%                                                                             | 28.1%                                                                             |                                                                                   | 5.0%                                                                               | 71.9%                                                                               |                                                                                     | 66.9%                                                                               | 66.9%                                                                               |                                                                                     |
| Maximum Green (s)       | 41.0                                                                              | 41.0                                                                              |                                                                                   | 41.0                                                                              | 41.0                                                                              |                                                                                   | 4.0                                                                                | 111.0                                                                               |                                                                                     | 103.0                                                                               | 103.0                                                                               |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                                | 3.5                                                                                 |                                                                                     | 3.5                                                                                 | 3.5                                                                                 |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                                | 0.5                                                                                 |                                                                                     | 0.5                                                                                 | 0.5                                                                                 |                                                                                     |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    | 4.0                                                                                 |                                                                                     |                                                                                     | 4.0                                                                                 |                                                                                     |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                                |                                                                                     |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                               | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               |                                                                                     |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                              | 11.0                                                                              |                                                                                   |                                                                                    | 11.0                                                                                |                                                                                     | 11.0                                                                                | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Act Effect Green (s)    |                                                                                   | 38.4                                                                              |                                                                                   |                                                                                   | 38.4                                                                              |                                                                                   |                                                                                    | 113.6                                                                               |                                                                                     |                                                                                     | 113.6                                                                               |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.24                                                                              |                                                                                   |                                                                                   | 0.24                                                                              |                                                                                   |                                                                                    | 0.71                                                                                |                                                                                     |                                                                                     | 0.71                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 0.93                                                                              |                                                                                   |                                                                                   | 0.11                                                                              |                                                                                   |                                                                                    | 0.89                                                                                |                                                                                     |                                                                                     | 0.52                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 93.6                                                                              |                                                                                   |                                                                                   | 40.7                                                                              |                                                                                   |                                                                                    | 24.9                                                                                |                                                                                     |                                                                                     | 13.1                                                                                |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.2                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 93.6                                                                              |                                                                                   |                                                                                   | 40.7                                                                              |                                                                                   |                                                                                    | 24.9                                                                                |                                                                                     |                                                                                     | 13.3                                                                                |                                                                                     |
| LOS                     |                                                                                   | F                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | C                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   | 93.6                                                                              |                                                                                   |                                                                                   | 40.7                                                                              |                                                                                   |                                                                                    | 24.9                                                                                |                                                                                     |                                                                                     | 13.3                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | F                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | C                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 26.7

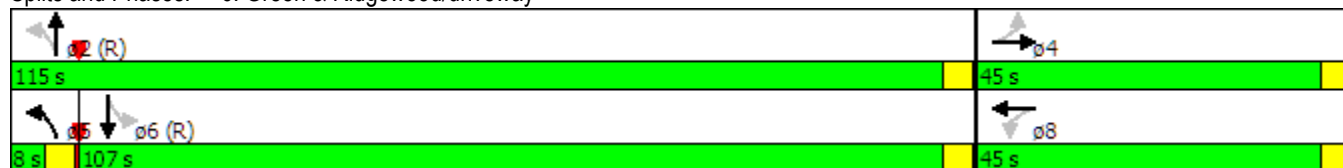
Intersection LOS: C

Intersection Capacity Utilization 96.6%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 6: Green & Ridgewood/driveway



## Appendix D

### Future Intersection Operational Analysis



Thompson Bridge / Enota Convenience  
1: Thompson Bridge & Walmart/Taco Bell

future a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |
| Volume (vph)               | 40                                                                                | 0                                                                                 | 68                                                                                | 3                                                                                 | 1                                                                                 | 4                                                                                 | 55                                                                                  | 939                                                                                 | 1                                                                                   | 6                                                                                   | 1995                                                                                | 85                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 50                                                                                |                                                                                   | 0                                                                                 | 50                                                                                |                                                                                   | 0                                                                                 | 200                                                                                 |                                                                                     | 100                                                                                 | 200                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                  |                                                                                     |                                                                                     | 25                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.871                                                                             |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     | 0.994                                                                               |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1787                                                                              | 1599                                                                              | 0                                                                                 | 1787                                                                              | 1639                                                                              | 0                                                                                 | 1787                                                                                | 3539                                                                                | 1599                                                                                | 1787                                                                                | 3519                                                                                | 0                                                                                   |
| Flt Permitted              | 0.753                                                                             |                                                                                   |                                                                                   | 0.511                                                                             |                                                                                   |                                                                                   | 0.042                                                                               |                                                                                     |                                                                                     | 0.285                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1417                                                                              | 1599                                                                              | 0                                                                                 | 961                                                                               | 1639                                                                              | 0                                                                                 | 79                                                                                  | 3539                                                                                | 1599                                                                                | 536                                                                                 | 3519                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 63                                                                                |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                     |                                                                                     | 34                                                                                  |                                                                                     |                                                                                     | 8                                                                                   |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 30                                                                                  |                                                                                     |                                                                                     |                                                                                     | 30                                                                                  |
| Link Distance (ft)         |                                                                                   | 300                                                                               |                                                                                   |                                                                                   | 195                                                                               |                                                                                   |                                                                                     | 1235                                                                                |                                                                                     |                                                                                     |                                                                                     | 500                                                                                 |
| Travel Time (s)            |                                                                                   | 6.8                                                                               |                                                                                   |                                                                                   | 4.4                                                                               |                                                                                   |                                                                                     | 28.1                                                                                |                                                                                     |                                                                                     |                                                                                     | 11.4                                                                                |
| Peak Hour Factor           | 0.85                                                                              | 0.85                                                                              | 0.85                                                                              | 0.67                                                                              | 0.67                                                                              | 0.67                                                                              | 0.94                                                                                | 0.94                                                                                | 0.94                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                  | 2%                                                                                  | 1%                                                                                  | 1%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 47                                                                                | 0                                                                                 | 80                                                                                | 4                                                                                 | 1                                                                                 | 6                                                                                 | 59                                                                                  | 999                                                                                 | 1                                                                                   | 7                                                                                   | 2217                                                                                | 94                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 47                                                                                | 80                                                                                | 0                                                                                 | 4                                                                                 | 7                                                                                 | 0                                                                                 | 59                                                                                  | 999                                                                                 | 1                                                                                   | 7                                                                                   | 2311                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     |                                                                                     | 12                                                                                  |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     |                                                                                     | 0                                                                                   |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     |                                                                                     | 16                                                                                  |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                  | 100                                                                                 | 20                                                                                  | 20                                                                                  | 100                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                  | 6                                                                                   | 20                                                                                  | 20                                                                                  | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(ft)    |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                     | 94                                                                                  |                                                                                     |                                                                                     |                                                                                     | 94                                                                                  |
| Detector 2 Size(ft)        |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               |                                                                                     | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   | 6                                                                                   |                                                                                     |                                                                                     |

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|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Detector Phase          | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   | 2                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              |                                                                                   | 20.0                                                                              | 20.0                                                                              |                                                                                   | 8.0                                                                                | 20.0                                                                                | 20.0                                                                                | 8.0                                                                                 | 20.0                                                                                |                                                                                     |
| Total Split (s)         | 20.0                                                                              | 20.0                                                                              |                                                                                   | 20.0                                                                              | 20.0                                                                              |                                                                                   | 13.0                                                                               | 132.0                                                                               | 132.0                                                                               | 8.0                                                                                 | 127.0                                                                               |                                                                                     |
| Total Split (%)         | 12.5%                                                                             | 12.5%                                                                             |                                                                                   | 12.5%                                                                             | 12.5%                                                                             |                                                                                   | 8.1%                                                                               | 82.5%                                                                               | 82.5%                                                                               | 5.0%                                                                                | 79.4%                                                                               |                                                                                     |
| Maximum Green (s)       | 16.0                                                                              | 16.0                                                                              |                                                                                   | 16.0                                                                              | 16.0                                                                              |                                                                                   | 9.0                                                                                | 128.0                                                                               | 128.0                                                                               | 4.0                                                                                 | 123.0                                                                               |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                                | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                                | 0.5                                                                                 | 0.5                                                                                 | 0.5                                                                                 | 0.5                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                                | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                               | C-Max                                                                               | C-Max                                                                               | None                                                                                | C-Max                                                                               |                                                                                     |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                              | 11.0                                                                              |                                                                                   |                                                                                    | 11.0                                                                                | 11.0                                                                                |                                                                                     | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |
| Act Effect Green (s)    | 10.7                                                                              | 10.7                                                                              |                                                                                   | 10.7                                                                              | 10.7                                                                              |                                                                                   | 141.3                                                                              | 139.6                                                                               | 139.6                                                                               | 136.4                                                                               | 132.2                                                                               |                                                                                     |
| Actuated g/C Ratio      | 0.07                                                                              | 0.07                                                                              |                                                                                   | 0.07                                                                              | 0.07                                                                              |                                                                                   | 0.88                                                                               | 0.87                                                                                | 0.87                                                                                | 0.85                                                                                | 0.83                                                                                |                                                                                     |
| v/c Ratio               | 0.50                                                                              | 0.48                                                                              |                                                                                   | 0.06                                                                              | 0.06                                                                              |                                                                                   | 0.41                                                                               | 0.32                                                                                | 0.00                                                                                | 0.01                                                                                | 0.79                                                                                |                                                                                     |
| Control Delay           | 88.8                                                                              | 31.8                                                                              |                                                                                   | 69.3                                                                              | 40.6                                                                              |                                                                                   | 21.7                                                                               | 3.0                                                                                 | 0.0                                                                                 | 1.7                                                                                 | 11.1                                                                                |                                                                                     |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Delay             | 88.8                                                                              | 31.8                                                                              |                                                                                   | 69.3                                                                              | 40.6                                                                              |                                                                                   | 21.7                                                                               | 3.0                                                                                 | 0.0                                                                                 | 1.7                                                                                 | 11.1                                                                                |                                                                                     |
| LOS                     | F                                                                                 | C                                                                                 |                                                                                   | E                                                                                 | D                                                                                 |                                                                                   | C                                                                                  | A                                                                                   | A                                                                                   | A                                                                                   | B                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   | 52.9                                                                              |                                                                                   |                                                                                   | 51.0                                                                              |                                                                                   |                                                                                    | 4.0                                                                                 |                                                                                     |                                                                                     | 11.1                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 10.6

Intersection LOS: B

Intersection Capacity Utilization 73.4%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 1: Thompson Bridge & Walmart/Taco Bell

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
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| 8 s                                                                                 | 132 s                                                                               | 20 s                                                                                | 13 s                                                                                | 127 s                                                                               | 20 s                                                                                | 13 s                                                                                | 127 s                                                                               | 20 s                                                                                | 13 s                                                                                  | 127 s                                                                                 | 20 s                                                                                  | 13 s                                                                                  | 127 s                                                                                 | 20 s                                                                                  |

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|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |  |  |  |  |  |  |  |
| Volume (vph)               | 72                                                                                | 62                                                                                | 31                                                                                | 53                                                                                | 33                                                                                | 177                                                                               | 18                                                                                  | 779                                                                                 | 28                                                                                  | 332                                                                                 | 1706                                                                                | 34                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 300                                                                               |                                                                                   | 0                                                                                 | 200                                                                               |                                                                                   | 200                                                                               | 300                                                                                 |                                                                                     | 0                                                                                   | 300                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                  |                                                                                     |                                                                                     | 25                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.949                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     | 0.995                                                                               |                                                                                     |                                                                                     | 0.997                                                                               |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1805                                                                              | 1803                                                                              | 0                                                                                 | 1787                                                                              | 1900                                                                              | 1599                                                                              | 1805                                                                                | 3523                                                                                | 0                                                                                   | 1787                                                                                | 3530                                                                                | 0                                                                                   |
| Flt Permitted              | 0.557                                                                             |                                                                                   |                                                                                   | 0.694                                                                             |                                                                                   |                                                                                   | 0.076                                                                               |                                                                                     |                                                                                     | 0.282                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1058                                                                              | 1803                                                                              | 0                                                                                 | 1306                                                                              | 1900                                                                              | 1599                                                                              | 144                                                                                 | 3523                                                                                | 0                                                                                   | 530                                                                                 | 3530                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 14                                                                                |                                                                                   |                                                                                   |                                                                                   | 199                                                                               |                                                                                     | 3                                                                                   |                                                                                     |                                                                                     | 3                                                                                   |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 30                                                                                  |                                                                                     |                                                                                     | 30                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 160                                                                               |                                                                                   |                                                                                   | 1380                                                                              |                                                                                   |                                                                                     | 173                                                                                 |                                                                                     |                                                                                     | 1235                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 3.6                                                                               |                                                                                   |                                                                                   | 31.4                                                                              |                                                                                   |                                                                                     | 3.9                                                                                 |                                                                                     |                                                                                     | 28.1                                                                                |                                                                                     |
| Peak Hour Factor           | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.94                                                                                | 0.94                                                                                | 0.94                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 1%                                                                                | 0%                                                                                | 1%                                                                                | 0%                                                                                  | 2%                                                                                  | 1%                                                                                  | 1%                                                                                  | 2%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 76                                                                                | 65                                                                                | 33                                                                                | 60                                                                                | 37                                                                                | 199                                                                               | 19                                                                                  | 829                                                                                 | 30                                                                                  | 369                                                                                 | 1896                                                                                | 38                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 76                                                                                | 98                                                                                | 0                                                                                 | 60                                                                                | 37                                                                                | 199                                                                               | 19                                                                                  | 859                                                                                 | 0                                                                                   | 369                                                                                 | 1934                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                | 100                                                                               | 20                                                                                | 20                                                                                  | 100                                                                                 |                                                                                     | 20                                                                                  | 100                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                | 6                                                                                 | 20                                                                                | 20                                                                                  | 6                                                                                   |                                                                                     | 20                                                                                  | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(ft)    |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                     | 94                                                                                  |                                                                                     |                                                                                     | 94                                                                                  |                                                                                     |
| Detector 2 Size(ft)        |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | pm+pt                                                                             | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  |                                                                                     | pm+pt                                                                               | NA                                                                                  |                                                                                     |
| Protected Phases           | 7                                                                                 | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 8                                                                                 | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |

# Thompson Bridge / Enota Convenience

## 2: Thompson Bridge & Enota

future a.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Detector Phase          | 7                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 | 8                                                                                 | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                 | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Minimum Split (s)       | 8.0                                                                               | 20.0                                                                              |                                                                                   | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 8.0                                                                                 | 20.0                                                                                |                                                                                     | 8.0                                                                                 | 20.0                                                                                |                                                                                     |
| Total Split (s)         | 10.0                                                                              | 35.0                                                                              |                                                                                   | 25.0                                                                              | 25.0                                                                              | 25.0                                                                              | 8.0                                                                                 | 84.0                                                                                |                                                                                     | 41.0                                                                                | 117.0                                                                               |                                                                                     |
| Total Split (%)         | 6.3%                                                                              | 21.9%                                                                             |                                                                                   | 15.6%                                                                             | 15.6%                                                                             | 15.6%                                                                             | 5.0%                                                                                | 52.5%                                                                               |                                                                                     | 25.6%                                                                               | 73.1%                                                                               |                                                                                     |
| Maximum Green (s)       | 6.0                                                                               | 31.0                                                                              |                                                                                   | 21.0                                                                              | 21.0                                                                              | 21.0                                                                              | 4.0                                                                                 | 80.0                                                                                |                                                                                     | 37.0                                                                                | 113.0                                                                               |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                                 | 3.5                                                                                 |                                                                                     | 3.5                                                                                 | 3.5                                                                                 |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                                 | 0.5                                                                                 |                                                                                     | 0.5                                                                                 | 0.5                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                 | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Lead/Lag                | Lead                                                                              |                                                                                   |                                                                                   | Lag                                                                               |                                                                                   |                                                                                   | Lead                                                                                |                                                                                     | Lag                                                                                 | Lead                                                                                |                                                                                     | Lag                                                                                 |
| Lead-Lag Optimize?      | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                                 |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     | Yes                                                                                 |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              | None                                                                              | None                                                                                | C-Max                                                                               |                                                                                     | None                                                                                | C-Max                                                                               |                                                                                     |
| Walk Time (s)           |                                                                                   | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   | 11.0                                                                              |                                                                                   | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              |                                                                                     | 11.0                                                                                |                                                                                     |                                                                                     | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Act Effect Green (s)    | 22.7                                                                              | 22.7                                                                              |                                                                                   | 12.7                                                                              | 12.7                                                                              | 12.7                                                                              | 116.3                                                                               | 110.5                                                                               |                                                                                     | 129.3                                                                               | 123.3                                                                               |                                                                                     |
| Actuated g/C Ratio      | 0.14                                                                              | 0.14                                                                              |                                                                                   | 0.08                                                                              | 0.08                                                                              | 0.08                                                                              | 0.73                                                                                | 0.69                                                                                |                                                                                     | 0.81                                                                                | 0.77                                                                                |                                                                                     |
| v/c Ratio               | 0.43                                                                              | 0.37                                                                              |                                                                                   | 0.58                                                                              | 0.25                                                                              | 0.64                                                                              | 0.12                                                                                | 0.35                                                                                |                                                                                     | 0.68                                                                                | 0.71                                                                                |                                                                                     |
| Control Delay           | 68.1                                                                              | 56.0                                                                              |                                                                                   | 91.9                                                                              | 71.2                                                                              | 18.0                                                                              | 5.6                                                                                 | 9.2                                                                                 |                                                                                     | 12.6                                                                                | 7.4                                                                                 |                                                                                     |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.1                                                                                 |                                                                                     |
| Total Delay             | 68.1                                                                              | 56.0                                                                              |                                                                                   | 91.9                                                                              | 71.2                                                                              | 18.0                                                                              | 5.6                                                                                 | 9.2                                                                                 |                                                                                     | 12.6                                                                                | 7.4                                                                                 |                                                                                     |
| LOS                     | E                                                                                 | E                                                                                 |                                                                                   | F                                                                                 | E                                                                                 | B                                                                                 | A                                                                                   | A                                                                                   |                                                                                     | B                                                                                   | A                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   | 61.3                                                                              |                                                                                   |                                                                                   | 39.6                                                                              |                                                                                   |                                                                                     | 9.1                                                                                 |                                                                                     |                                                                                     | 8.3                                                                                 |                                                                                     |
| Approach LOS            |                                                                                   | E                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                     | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 41 (26%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 13.5

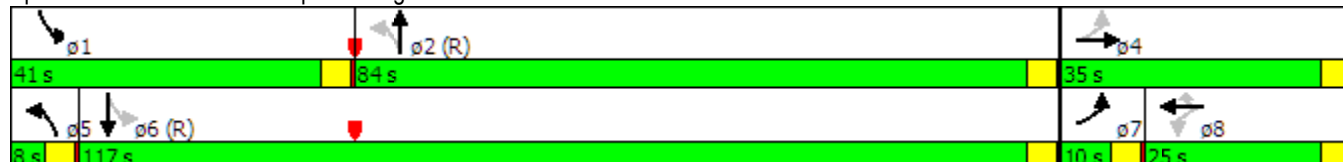
Intersection LOS: B

Intersection Capacity Utilization 72.2%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 2: Thompson Bridge & Enota



Thompson Bridge / Enota Convenience  
3: Riverside & Enota

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| Intersection              |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Intersection Delay, s/veh | 32.1 |      |      |      |      |      |      |      |      |      |      |      |
| Intersection LOS          | D    |      |      |      |      |      |      |      |      |      |      |      |
| Movement                  | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
| Vol, veh/h                | 0    | 12   | 329  | 8    | 0    | 48   | 218  | 42   | 0    | 11   | 58   | 69   |
| Peak Hour Factor          | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.75 | 0.75 | 0.75 | 0.92 | 0.60 | 0.60 | 0.60 |
| Heavy Vehicles, %         | 2    | 1    | 1    | 1    | 2    | 1    | 1    | 1    | 2    | 1    | 1    | 1    |
| Mvmt Flow                 | 0    | 13   | 358  | 9    | 0    | 64   | 291  | 56   | 0    | 18   | 97   | 115  |
| Number of Lanes           | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB | NB |
|----------------------------|------|----|----|
| Opposing Approach          | WB   | EB | SB |
| Opposing Lanes             | 1    | 1  | 1  |
| Conflicting Approach Left  | SB   | NB | EB |
| Conflicting Lanes Left     | 1    | 1  | 1  |
| Conflicting Approach Right | NB   | SB | WB |
| Conflicting Lanes Right    | 1    | 1  | 1  |
| HCM Control Delay          | 33.7 | 39 | 19 |
| HCM LOS                    | D    | E  | C  |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 8%    | 3%    | 16%   | 49%   |
| Vol Thru, %            | 42%   | 94%   | 71%   | 44%   |
| Vol Right, %           | 50%   | 2%    | 14%   | 6%    |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 138   | 349   | 308   | 293   |
| LT Vol                 | 11    | 12    | 48    | 145   |
| Through Vol            | 58    | 329   | 218   | 129   |
| RT Vol                 | 69    | 8     | 42    | 19    |
| Lane Flow Rate         | 230   | 379   | 411   | 349   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.507 | 0.792 | 0.843 | 0.752 |
| Departure Headway (Hd) | 7.928 | 7.517 | 7.386 | 7.762 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 453   | 482   | 489   | 464   |
| Service Time           | 6.01  | 5.588 | 5.453 | 5.831 |
| HCM Lane V/C Ratio     | 0.508 | 0.786 | 0.84  | 0.752 |
| HCM Control Delay      | 19    | 33.7  | 39    | 30.9  |
| HCM Lane LOS           | C     | D     | E     | D     |
| HCM 95th-tile Q        | 2.8   | 7.2   | 8.5   | 6.3   |

Intersection

Intersection Delay, s/veh

Intersection LOS

| Movement          | SBU  | SBL  | SBT  | SBR  |
|-------------------|------|------|------|------|
| Vol, veh/h        | 0    | 145  | 129  | 19   |
| Peak Hour Factor  | 0.92 | 0.84 | 0.84 | 0.84 |
| Heavy Vehicles, % | 2    | 1    | 1    | 1    |
| Mvmt Flow         | 0    | 173  | 154  | 23   |
| Number of Lanes   | 0    | 0    | 1    | 0    |

| Approach                   | SB   |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 30.9 |
| HCM LOS                    | D    |

Lane

## Thompson Bridge / Enota Convenience

## 4: GA 11 Bus &amp; South Enota

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|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | NBL                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                               | SBR                                                                               | SEL                                                                                | SET                                                                                 | SER                                                                                 | NWL                                                                                 | NWT                                                                                 | NWR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |  |  |  |
| Volume (vph)               | 14                                                                                | 475                                                                               | 121                                                                               | 160                                                                               | 904                                                                               | 183                                                                               | 291                                                                                | 271                                                                                 | 37                                                                                  | 86                                                                                  | 138                                                                                 | 91                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                               | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 200                                                                               |                                                                                   | 0                                                                                 | 200                                                                               |                                                                                   | 0                                                                                 | 300                                                                                |                                                                                     | 0                                                                                   | 400                                                                                 |                                                                                     | 400                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                 |                                                                                     |                                                                                     | 25                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.969                                                                             |                                                                                   |                                                                                   | 0.975                                                                             |                                                                                   |                                                                                    | 0.982                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1787                                                                              | 1809                                                                              | 0                                                                                 | 1787                                                                              | 1819                                                                              | 0                                                                                 | 1787                                                                               | 1847                                                                                | 0                                                                                   | 1787                                                                                | 1881                                                                                | 1599                                                                                |
| Flt Permitted              | 0.044                                                                             |                                                                                   |                                                                                   | 0.251                                                                             |                                                                                   |                                                                                   | 0.205                                                                              |                                                                                     |                                                                                     | 0.281                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 83                                                                                | 1809                                                                              | 0                                                                                 | 472                                                                               | 1819                                                                              | 0                                                                                 | 386                                                                                | 1847                                                                                | 0                                                                                   | 529                                                                                 | 1881                                                                                | 1599                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 13                                                                                |                                                                                   |                                                                                   | 13                                                                                |                                                                                   |                                                                                    | 4                                                                                   |                                                                                     |                                                                                     |                                                                                     | 116                                                                                 |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 30                                                                                  |                                                                                     |                                                                                     |                                                                                     | 30                                                                                  |
| Link Distance (ft)         |                                                                                   | 494                                                                               |                                                                                   |                                                                                   | 509                                                                               |                                                                                   |                                                                                    | 1007                                                                                |                                                                                     |                                                                                     |                                                                                     | 495                                                                                 |
| Travel Time (s)            |                                                                                   | 11.2                                                                              |                                                                                   |                                                                                   | 11.6                                                                              |                                                                                   |                                                                                    | 22.9                                                                                |                                                                                     |                                                                                     |                                                                                     | 11.3                                                                                |
| Peak Hour Factor           | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.80                                                                               | 0.80                                                                                | 0.80                                                                                | 0.88                                                                                | 0.88                                                                                | 0.88                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 2%                                                                                | 1%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                | 1%                                                                                 | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 15                                                                                | 516                                                                               | 132                                                                               | 174                                                                               | 983                                                                               | 199                                                                               | 364                                                                                | 339                                                                                 | 46                                                                                  | 98                                                                                  | 157                                                                                 | 103                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 15                                                                                | 648                                                                               | 0                                                                                 | 174                                                                               | 1182                                                                              | 0                                                                                 | 364                                                                                | 385                                                                                 | 0                                                                                   | 98                                                                                  | 157                                                                                 | 103                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                               | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                    | 12                                                                                  |                                                                                     |                                                                                     |                                                                                     | 12                                                                                  |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     |                                                                                     | 0                                                                                   |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                    | 16                                                                                  |                                                                                     |                                                                                     |                                                                                     | 16                                                                                  |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                 |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                | Right                                                                               |
| Leading Detector (ft)      | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                 | 100                                                                                 |                                                                                     | 20                                                                                  | 100                                                                                 | 20                                                                                  |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                 | 6                                                                                   |                                                                                     | 20                                                                                  | 6                                                                                   | 20                                                                                  |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(ft)    |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                    | 94                                                                                  |                                                                                     |                                                                                     |                                                                                     | 94                                                                                  |
| Detector 2 Size(ft)        |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                    | 6                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                             | NA                                                                                |                                                                                   | pm+pt                                                                              | NA                                                                                  |                                                                                     | pm+pt                                                                               | NA                                                                                  | Free                                                                                |
| Protected Phases           |                                                                                   | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 |                                                                                   | 7                                                                                  | 4                                                                                   |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     |
| Permitted Phases           | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 4                                                                                  |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     | Free                                                                                |

# Thompson Bridge / Enota Convenience

## 4: GA 11 Bus & South Enota

future a.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | NBL                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                               | SBR                                                                               | SEL                                                                                | SET                                                                                 | SER                                                                                 | NWL                                                                                 | NWT                                                                                 | NWR                                                                                 |
| Detector Phase          | 2                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 |                                                                                   | 7                                                                                  | 4                                                                                   |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              |                                                                                   | 8.0                                                                               | 20.0                                                                              |                                                                                   | 8.0                                                                                | 20.0                                                                                |                                                                                     | 8.0                                                                                 | 20.0                                                                                |                                                                                     |
| Total Split (s)         | 95.0                                                                              | 95.0                                                                              |                                                                                   | 14.0                                                                              | 109.0                                                                             |                                                                                   | 31.0                                                                               | 42.0                                                                                |                                                                                     | 9.0                                                                                 | 20.0                                                                                |                                                                                     |
| Total Split (%)         | 59.4%                                                                             | 59.4%                                                                             |                                                                                   | 8.8%                                                                              | 68.1%                                                                             |                                                                                   | 19.4%                                                                              | 26.3%                                                                               |                                                                                     | 5.6%                                                                                | 12.5%                                                                               |                                                                                     |
| Maximum Green (s)       | 91.0                                                                              | 91.0                                                                              |                                                                                   | 10.0                                                                              | 105.0                                                                             |                                                                                   | 27.0                                                                               | 38.0                                                                                |                                                                                     | 5.0                                                                                 | 16.0                                                                                |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                                | 3.5                                                                                 |                                                                                     | 3.5                                                                                 | 3.5                                                                                 |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                                | 0.5                                                                                 |                                                                                     | 0.5                                                                                 | 0.5                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Lead/Lag                | Lag                                                                               | Lag                                                                               |                                                                                   | Lead                                                                              |                                                                                   |                                                                                   | Lead                                                                               | Lag                                                                                 |                                                                                     | Lead                                                                                | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      | Yes                                                                               | Yes                                                                               |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                                | Yes                                                                                 |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | C-Max                                                                             | C-Max                                                                             |                                                                                   | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                               | None                                                                                |                                                                                     | None                                                                                | None                                                                                |                                                                                     |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              |                                                                                   |                                                                                   | 11.0                                                                              |                                                                                   |                                                                                    | 11.0                                                                                |                                                                                     |                                                                                     | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Act Effect Green (s)    | 91.8                                                                              | 91.8                                                                              |                                                                                   | 105.5                                                                             | 105.5                                                                             |                                                                                   | 46.5                                                                               | 37.5                                                                                |                                                                                     | 20.5                                                                                | 15.5                                                                                | 160.0                                                                               |
| Actuated g/C Ratio      | 0.57                                                                              | 0.57                                                                              |                                                                                   | 0.66                                                                              | 0.66                                                                              |                                                                                   | 0.29                                                                               | 0.23                                                                                |                                                                                     | 0.13                                                                                | 0.10                                                                                | 1.00                                                                                |
| v/c Ratio               | 0.32                                                                              | 0.62                                                                              |                                                                                   | 0.45                                                                              | 0.98                                                                              |                                                                                   | 1.05                                                                               | 0.89                                                                                |                                                                                     | 0.92                                                                                | 0.86                                                                                | 0.06                                                                                |
| Control Delay           | 40.2                                                                              | 25.5                                                                              |                                                                                   | 14.2                                                                              | 48.3                                                                              |                                                                                   | 109.2                                                                              | 80.6                                                                                |                                                                                     | 119.3                                                                               | 108.8                                                                               | 0.1                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 40.2                                                                              | 25.5                                                                              |                                                                                   | 14.2                                                                              | 48.3                                                                              |                                                                                   | 109.2                                                                              | 80.6                                                                                |                                                                                     | 119.3                                                                               | 108.8                                                                               | 0.1                                                                                 |
| LOS                     | D                                                                                 | C                                                                                 |                                                                                   | B                                                                                 | D                                                                                 |                                                                                   | F                                                                                  | F                                                                                   |                                                                                     | F                                                                                   | F                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 25.8                                                                              |                                                                                   |                                                                                   | 43.9                                                                              |                                                                                   |                                                                                    | 94.5                                                                                |                                                                                     |                                                                                     | 80.4                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | F                                                                                   |                                                                                     |                                                                                     | F                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.05

Intersection Signal Delay: 56.4

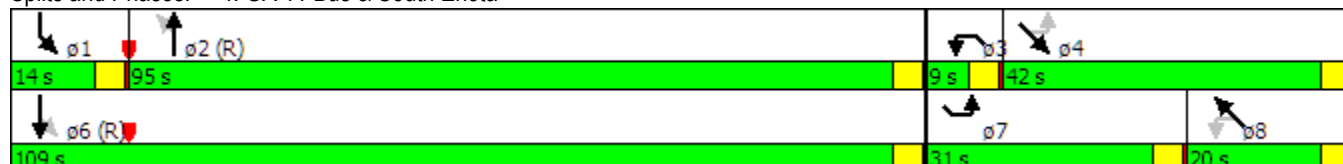
Intersection LOS: E

Intersection Capacity Utilization 98.7%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 4: GA 11 Bus & South Enota





Thompson Bridge / Enota Convenience  
5: Green/Thompson Bridge & Holly & GA 11 Bus

future a.m.

|                            |  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |                                                                                    |       |                                                                                     |                                                                                     |
|----------------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|------------------------------------------------------------------------------------|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                                | EBR                                                                               | NBL                                                                               | NBT                                                                               | NBR                                                                               | SBL  | SBT                                                                                | SBR   | SWL                                                                                 | SWR                                                                                 |
| Lane Configurations        |                                                                                    |  |  |  |  |      |  |       |  |  |
| Volume (vph)               | 0                                                                                  | 56                                                                                | 20                                                                                | 734                                                                               | 314                                                                               | 0    | 1485                                                                               | 140   | 489                                                                                 | 201                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                               | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900 | 1900                                                                               | 1900  | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 0                                                                                  | 0                                                                                 | 150                                                                               |                                                                                   | 200                                                                               | 0    |                                                                                    | 0     | 0                                                                                   | 0                                                                                   |
| Storage Lanes              | 0                                                                                  | 1                                                                                 | 1                                                                                 |                                                                                   | 2                                                                                 | 0    |                                                                                    | 0     | 2                                                                                   | 0                                                                                   |
| Taper Length (ft)          | 25                                                                                 |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25   |                                                                                    |       | 25                                                                                  |                                                                                     |
| Lane Util. Factor          | 1.00                                                                               | 1.00                                                                              | 1.00                                                                              | 0.95                                                                              | 0.88                                                                              | 1.00 | 0.95                                                                               | 0.95  | 0.97                                                                                | 0.95                                                                                |
| Frt                        |                                                                                    | 0.865                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |      | 0.987                                                                              |       | 0.956                                                                               |                                                                                     |
| Flt Protected              |                                                                                    |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |      |                                                                                    |       | 0.966                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                  | 1644                                                                              | 1805                                                                              | 3539                                                                              | 2814                                                                              | 0    | 3531                                                                               | 0     | 3333                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                    |                                                                                   | 0.066                                                                             |                                                                                   |                                                                                   |      |                                                                                    |       | 0.966                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                  | 1644                                                                              | 125                                                                               | 3539                                                                              | 2814                                                                              | 0    | 3531                                                                               | 0     | 3333                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                    | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |      |                                                                                    | Yes   |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                    | 34                                                                                |                                                                                   |                                                                                   | 353                                                                               |      | 13                                                                                 |       |                                                                                     |                                                                                     |
| Link Speed (mph)           | 30                                                                                 |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |      | 30                                                                                 |       | 30                                                                                  |                                                                                     |
| Link Distance (ft)         | 497                                                                                |                                                                                   |                                                                                   | 707                                                                               |                                                                                   |      | 3085                                                                               |       | 595                                                                                 |                                                                                     |
| Travel Time (s)            | 11.3                                                                               |                                                                                   |                                                                                   | 16.1                                                                              |                                                                                   |      | 70.1                                                                               |       | 13.5                                                                                |                                                                                     |
| Peak Hour Factor           | 0.92                                                                               | 0.83                                                                              | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.92 | 0.89                                                                               | 0.89  | 0.93                                                                                | 0.93                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                 | 0%                                                                                | 0%                                                                                | 2%                                                                                | 1%                                                                                | 0%   | 1%                                                                                 | 0%    | 3%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 0                                                                                  | 67                                                                                | 22                                                                                | 825                                                                               | 353                                                                               | 0    | 1669                                                                               | 157   | 526                                                                                 | 216                                                                                 |
| Shared Lane Traffic (%)    |                                                                                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |                                                                                    |       |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                  | 67                                                                                | 22                                                                                | 825                                                                               | 353                                                                               | 0    | 1826                                                                               | 0     | 742                                                                                 | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                 | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No   | No                                                                                 | No    | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                               | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left | Left                                                                               | Right | Left                                                                                | Right                                                                               |
| Median Width(ft)           | 0                                                                                  |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |      | 12                                                                                 |       | 24                                                                                  |                                                                                     |
| Link Offset(ft)            | 0                                                                                  |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |      | 0                                                                                  |       | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        | 16                                                                                 |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |      | 16                                                                                 |       | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |                                                                                    |       |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                               | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00 | 1.00                                                                               | 1.00  | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                 | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15   |                                                                                    | 9     | 15                                                                                  | 9                                                                                   |
| Number of Detectors        |                                                                                    | 1                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 |      | 2                                                                                  |       | 1                                                                                   |                                                                                     |
| Detector Template          |                                                                                    | Right                                                                             | Left                                                                              | Thru                                                                              | Right                                                                             |      | Thru                                                                               |       | Left                                                                                |                                                                                     |
| Leading Detector (ft)      |                                                                                    | 20                                                                                | 20                                                                                | 100                                                                               | 20                                                                                |      | 100                                                                                |       | 20                                                                                  |                                                                                     |
| Trailing Detector (ft)     |                                                                                    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |      | 0                                                                                  |       | 0                                                                                   |                                                                                     |
| Detector 1 Position(ft)    |                                                                                    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |      | 0                                                                                  |       | 0                                                                                   |                                                                                     |
| Detector 1 Size(ft)        |                                                                                    | 20                                                                                | 20                                                                                | 6                                                                                 | 20                                                                                |      | 6                                                                                  |       | 20                                                                                  |                                                                                     |
| Detector 1 Type            |                                                                                    | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |      | Cl+Ex                                                                              |       | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |                                                                                    |       |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      |                                                                                    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |      | 0.0                                                                                |       | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       |                                                                                    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |      | 0.0                                                                                |       | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       |                                                                                    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |      | 0.0                                                                                |       | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(ft)    |                                                                                    |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |      | 94                                                                                 |       |                                                                                     |                                                                                     |
| Detector 2 Size(ft)        |                                                                                    |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |      | 6                                                                                  |       |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                    |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |      | Cl+Ex                                                                              |       |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |                                                                                    |       |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                    |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |      | 0.0                                                                                |       |                                                                                     |                                                                                     |
| Turn Type                  |                                                                                    | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              |      | NA                                                                                 |       | Prot                                                                                |                                                                                     |
| Protected Phases           |                                                                                    |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |      | 6                                                                                  |       | 8                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                    | 4                                                                                 | 2                                                                                 |                                                                                   | 2                                                                                 |      |                                                                                    |       |                                                                                     |                                                                                     |

Thompson Bridge / Enota Convenience  
5: Green/Thompson Bridge & Holly & GA 11 Bus

future a.m.



| Lane Group              | EBL | EBR   | NBL   | NBT   | NBR   | SBL | SBT   | SBR | SWL   | SWR |
|-------------------------|-----|-------|-------|-------|-------|-----|-------|-----|-------|-----|
| Detector Phase          |     | 4     | 2     | 2     | 2     |     | 6     |     | 8     |     |
| Switch Phase            |     |       |       |       |       |     |       |     |       |     |
| Minimum Initial (s)     |     | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0   |     | 4.0   |     |
| Minimum Split (s)       |     | 20.0  | 20.0  | 20.0  | 20.0  |     | 20.0  |     | 20.0  |     |
| Total Split (s)         |     | 52.0  | 108.0 | 108.0 | 108.0 |     | 108.0 |     | 52.0  |     |
| Total Split (%)         |     | 32.5% | 67.5% | 67.5% | 67.5% |     | 67.5% |     | 32.5% |     |
| Maximum Green (s)       |     | 48.0  | 104.0 | 104.0 | 104.0 |     | 104.0 |     | 48.0  |     |
| Yellow Time (s)         |     | 3.5   | 3.5   | 3.5   | 3.5   |     | 3.5   |     | 3.5   |     |
| All-Red Time (s)        |     | 0.5   | 0.5   | 0.5   | 0.5   |     | 0.5   |     | 0.5   |     |
| Lost Time Adjust (s)    |     | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0   |     | 0.0   |     |
| Total Lost Time (s)     |     | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0   |     | 4.0   |     |
| Lead/Lag                |     |       |       |       |       |     |       |     |       |     |
| Lead-Lag Optimize?      |     |       |       |       |       |     |       |     |       |     |
| Vehicle Extension (s)   |     | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0   |     | 3.0   |     |
| Recall Mode             |     | None  | C-Max | C-Max | C-Max |     | C-Max |     | None  |     |
| Walk Time (s)           |     | 5.0   | 5.0   | 5.0   | 5.0   |     | 5.0   |     | 5.0   |     |
| Flash Dont Walk (s)     |     | 11.0  | 11.0  | 11.0  | 11.0  |     | 11.0  |     | 11.0  |     |
| Pedestrian Calls (#/hr) |     | 0     | 0     | 0     | 0     |     | 0     |     | 0     |     |
| Act Effect Green (s)    |     | 41.2  | 110.8 | 110.8 | 110.8 |     | 110.8 |     | 41.2  |     |
| Actuated g/C Ratio      |     | 0.26  | 0.69  | 0.69  | 0.69  |     | 0.69  |     | 0.26  |     |
| v/c Ratio               |     | 0.15  | 0.26  | 0.34  | 0.17  |     | 0.75  |     | 0.87  |     |
| Control Delay           |     | 23.9  | 17.2  | 8.5   | 0.3   |     | 25.9  |     | 67.8  |     |
| Queue Delay             |     | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.4   |     | 0.0   |     |
| Total Delay             |     | 23.9  | 17.2  | 8.5   | 0.3   |     | 26.3  |     | 67.8  |     |
| LOS                     |     | C     | B     | A     | A     |     | C     |     | E     |     |
| Approach Delay          |     |       |       | 6.2   |       |     | 26.3  |     | 67.8  |     |
| Approach LOS            |     |       |       | A     |       |     | C     |     | E     |     |

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 28.0

Intersection LOS: C

Intersection Capacity Utilization 72.4%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 5: Green/Thompson Bridge & Holly & GA 11 Bus

|                                                                                            |                                                                                          |
|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
|  p2 (R) |  p4 |
| 108 s                                                                                      | 52 s                                                                                     |
|  p6 (R) |  p8 |
| 108 s                                                                                      | 52 s                                                                                     |

## Thompson Bridge / Enota Convenience

## 6: Green &amp; Ridgewood/driveway

future a.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |                                                                                    |  |                                                                                     |                                                                                     |  |                                                                                     |
| Volume (vph)               | 141                                                                               | 5                                                                                 | 23                                                                                | 6                                                                                 | 6                                                                                 | 2                                                                                 | 15                                                                                 | 939                                                                                 | 12                                                                                  | 4                                                                                   | 1915                                                                                | 69                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                               | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.982                                                                             |                                                                                   |                                                                                   | 0.981                                                                             |                                                                                   |                                                                                    | 0.998                                                                               |                                                                                     |                                                                                     | 0.995                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.960                                                                             |                                                                                   |                                                                                   | 0.979                                                                             |                                                                                   |                                                                                    | 0.999                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1791                                                                              | 0                                                                                 | 0                                                                                 | 1825                                                                              | 0                                                                                 | 0                                                                                  | 3531                                                                                | 0                                                                                   | 0                                                                                   | 3558                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.774                                                                             |                                                                                   |                                                                                   | 0.910                                                                             |                                                                                   |                                                                                    | 0.859                                                                               |                                                                                     |                                                                                     | 0.953                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1444                                                                              | 0                                                                                 | 0                                                                                 | 1696                                                                              | 0                                                                                 | 0                                                                                  | 3036                                                                                | 0                                                                                   | 0                                                                                   | 3390                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 30                                                                                  |                                                                                     |                                                                                     | 30                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 511                                                                               |                                                                                   |                                                                                   | 308                                                                               |                                                                                   |                                                                                    | 511                                                                                 |                                                                                     |                                                                                     | 707                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 11.6                                                                              |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                    | 11.6                                                                                |                                                                                     |                                                                                     | 16.1                                                                                |                                                                                     |
| Peak Hour Factor           | 0.79                                                                              | 0.79                                                                              | 0.79                                                                              | 0.50                                                                              | 0.50                                                                              | 0.50                                                                              | 0.93                                                                               | 0.93                                                                                | 0.93                                                                                | 0.89                                                                                | 0.89                                                                                | 0.89                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                 | 2%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 178                                                                               | 6                                                                                 | 29                                                                                | 12                                                                                | 12                                                                                | 4                                                                                 | 16                                                                                 | 1010                                                                                | 13                                                                                  | 4                                                                                   | 2152                                                                                | 78                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 213                                                                               | 0                                                                                 | 0                                                                                 | 28                                                                                | 0                                                                                 | 0                                                                                  | 1039                                                                                | 0                                                                                   | 0                                                                                   | 2234                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                               | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                    | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                 |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                 | 100                                                                                 |                                                                                     | 20                                                                                  | 100                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                 | 6                                                                                   |                                                                                     | 20                                                                                  | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(ft)    |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                    | 94                                                                                  |                                                                                     |                                                                                     | 94                                                                                  |                                                                                     |
| Detector 2 Size(ft)        |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                    | 6                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                              | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |

# Thompson Bridge / Enota Convenience

## 6: Green & Ridgewood/driveway

future a.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              |                                                                                   | 20.0                                                                              | 20.0                                                                              |                                                                                   | 8.0                                                                                | 20.0                                                                                |                                                                                     | 20.0                                                                                | 20.0                                                                                |                                                                                     |
| Total Split (s)         | 32.0                                                                              | 32.0                                                                              |                                                                                   | 32.0                                                                              | 32.0                                                                              |                                                                                   | 8.0                                                                                | 128.0                                                                               |                                                                                     | 120.0                                                                               | 120.0                                                                               |                                                                                     |
| Total Split (%)         | 20.0%                                                                             | 20.0%                                                                             |                                                                                   | 20.0%                                                                             | 20.0%                                                                             |                                                                                   | 5.0%                                                                               | 80.0%                                                                               |                                                                                     | 75.0%                                                                               | 75.0%                                                                               |                                                                                     |
| Maximum Green (s)       | 28.0                                                                              | 28.0                                                                              |                                                                                   | 28.0                                                                              | 28.0                                                                              |                                                                                   | 4.0                                                                                | 124.0                                                                               |                                                                                     | 116.0                                                                               | 116.0                                                                               |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                                | 3.5                                                                                 |                                                                                     | 3.5                                                                                 | 3.5                                                                                 |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                                | 0.5                                                                                 |                                                                                     | 0.5                                                                                 | 0.5                                                                                 |                                                                                     |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    | 4.0                                                                                 |                                                                                     |                                                                                     | 4.0                                                                                 |                                                                                     |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                                |                                                                                     |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                               | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               |                                                                                     |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                              | 11.0                                                                              |                                                                                   |                                                                                    | 11.0                                                                                |                                                                                     | 11.0                                                                                | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Act Effect Green (s)    |                                                                                   | 26.0                                                                              |                                                                                   |                                                                                   | 26.0                                                                              |                                                                                   |                                                                                    | 126.0                                                                               |                                                                                     |                                                                                     | 126.0                                                                               |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.16                                                                              |                                                                                   |                                                                                   | 0.16                                                                              |                                                                                   |                                                                                    | 0.79                                                                                |                                                                                     |                                                                                     | 0.79                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 0.89                                                                              |                                                                                   |                                                                                   | 0.10                                                                              |                                                                                   |                                                                                    | 0.43                                                                                |                                                                                     |                                                                                     | 0.84                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 100.1                                                                             |                                                                                   |                                                                                   | 50.4                                                                              |                                                                                   |                                                                                    | 6.3                                                                                 |                                                                                     |                                                                                     | 13.8                                                                                |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.3                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 100.1                                                                             |                                                                                   |                                                                                   | 50.4                                                                              |                                                                                   |                                                                                    | 6.3                                                                                 |                                                                                     |                                                                                     | 14.1                                                                                |                                                                                     |
| LOS                     |                                                                                   | F                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   | 100.1                                                                             |                                                                                   |                                                                                   | 50.4                                                                              |                                                                                   |                                                                                    | 6.3                                                                                 |                                                                                     |                                                                                     | 14.1                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | F                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 17.3

Intersection LOS: B

Intersection Capacity Utilization 80.7%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 6: Green & Ridgewood/driveway

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |  |  |
| 128 s                                                                               |                                                                                     |                                                                                     | 32 s                                                                                |                                                                                     |                                                                                     | 32 s                                                                                |                                                                                     |                                                                                     |
|  |  |  |  |  |  |  |  |  |
| 8 s                                                                                 | 120 s                                                                               |                                                                                     | 32 s                                                                                |                                                                                     |                                                                                     | 32 s                                                                                |                                                                                     |                                                                                     |

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| Intersection             |        |      |        |      |        |      |
|--------------------------|--------|------|--------|------|--------|------|
| Int Delay, s/veh         | 0.5    |      |        |      |        |      |
|                          |        |      |        |      |        |      |
| Movement                 | EBL    | EBR  | NBL    | NBT  | SBT    | SBR  |
| Vol, veh/h               | 0      | 35   | 21     | 812  | 1754   | 35   |
| Conflicting Peds, #/hr   | 0      | 0    | 0      | 0    | 0      | 0    |
| Sign Control             | Stop   | Stop | Free   | Free | Free   | Free |
| RT Channelized           | -      | None | -      | None | -      | None |
| Storage Length           | 0      | -    | 0      | -    | -      | -    |
| Veh in Median Storage, # | 0      | -    | -      | 0    | 0      | -    |
| Grade, %                 | 0      | -    | -      | 0    | 0      | -    |
| Peak Hour Factor         | 85     | 85   | 94     | 94   | 90     | 90   |
| Heavy Vehicles, %        | 0      | 0    | 0      | 2    | 2      | 0    |
| Mvmt Flow                | 0      | 41   | 22     | 864  | 1949   | 39   |
|                          |        |      |        |      |        |      |
| Major/Minor              | Minor2 |      | Major1 |      | Major2 |      |
| Conflicting Flow All     | 2445   | 994  | 1988   | 0    | -      | 0    |
| Stage 1                  | 1968   | -    | -      | -    | -      | -    |
| Stage 2                  | 477    | -    | -      | -    | -      | -    |
| Critical Hdwy            | 6.8    | 6.9  | 4.1    | -    | -      | -    |
| Critical Hdwy Stg 1      | 5.8    | -    | -      | -    | -      | -    |
| Critical Hdwy Stg 2      | 5.8    | -    | -      | -    | -      | -    |
| Follow-up Hdwy           | 3.5    | 3.3  | 2.2    | -    | -      | -    |
| Pot Cap-1 Maneuver       | 27     | 247  | 294    | -    | -      | -    |
| Stage 1                  | 97     | -    | -      | -    | -      | -    |
| Stage 2                  | 596    | -    | -      | -    | -      | -    |
| Platoon blocked, %       |        |      |        | -    | -      | -    |
| Mov Cap-1 Maneuver       | 25     | 247  | 294    | -    | -      | -    |
| Mov Cap-2 Maneuver       | 25     | -    | -      | -    | -      | -    |
| Stage 1                  | 97     | -    | -      | -    | -      | -    |
| Stage 2                  | 551    | -    | -      | -    | -      | -    |
|                          |        |      |        |      |        |      |
| Approach                 | EB     |      | NB     |      | SB     |      |
| HCM Control Delay, s     | 22.5   |      | 0.5    |      | 0      |      |
| HCM LOS                  | C      |      |        |      |        |      |
|                          |        |      |        |      |        |      |
| Minor Lane/Major Mvmt    | NBL    | NBT  | EBLn1  | SBT  | SBR    |      |
| Capacity (veh/h)         | 294    | -    | 247    | -    | -      |      |
| HCM Lane V/C Ratio       | 0.076  | -    | 0.167  | -    | -      |      |
| HCM Control Delay (s)    | 18.2   | -    | 22.5   | -    | -      |      |
| HCM Lane LOS             | C      | -    | C      | -    | -      |      |
| HCM 95th %tile Q(veh)    | 0.2    | -    | 0.6    | -    | -      |      |

**Intersection**

Int Delay, s/veh 1.4

| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
|--------------------------|------|------|------|------|------|------|
| Vol, veh/h               | 139  | 5    | 6    | 79   | 5    | 26   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 95   | 95   | 89   | 89   | 80   | 80   |
| Heavy Vehicles, %        | 1    | 0    | 0    | 1    | 0    | 0    |
| Mvmt Flow                | 146  | 5    | 7    | 89   | 6    | 32   |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |     |
|----------------------|--------|---|--------|---|--------|-----|
| Conflicting Flow All | 0      | 0 | 152    | 0 | 251    | 149 |
| Stage 1              | -      | - | -      | - | 149    | -   |
| Stage 2              | -      | - | -      | - | 102    | -   |
| Critical Hdwy        | -      | - | 4.1    | - | 6.4    | 6.2 |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.4    | -   |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.4    | -   |
| Follow-up Hdwy       | -      | - | 2.2    | - | 3.5    | 3.3 |
| Pot Cap-1 Maneuver   | -      | - | 1441   | - | 742    | 903 |
| Stage 1              | -      | - | -      | - | 884    | -   |
| Stage 2              | -      | - | -      | - | 927    | -   |
| Platoon blocked, %   | -      | - | -      | - | -      | -   |
| Mov Cap-1 Maneuver   | -      | - | 1441   | - | 738    | 903 |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 738    | -   |
| Stage 1              | -      | - | -      | - | 884    | -   |
| Stage 2              | -      | - | -      | - | 922    | -   |

| Approach             | EB | WB  | NB  |
|----------------------|----|-----|-----|
| HCM Control Delay, s | 0  | 0.5 | 9.3 |
| HCM LOS              |    |     | A   |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 872   | -   | -   | 1441  | -   |
| HCM Lane V/C Ratio    | 0.044 | -   | -   | 0.005 | -   |
| HCM Control Delay (s) | 9.3   | -   | -   | 7.5   | 0   |
| HCM Lane LOS          | A     | -   | -   | A     | A   |
| HCM 95th %tile Q(veh) | 0.1   | -   | -   | 0     | -   |

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|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |  |  |  |  |
| Volume (vph)               | 75                                                                                | 3                                                                                 | 39                                                                                | 15                                                                                | 2                                                                                 | 27                                                                                | 60                                                                                  | 2097                                                                                | 21                                                                                  | 14                                                                                  | 1172                                                                                | 57                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 50                                                                                |                                                                                   | 0                                                                                 | 50                                                                                |                                                                                   | 0                                                                                 | 200                                                                                 |                                                                                     | 100                                                                                 | 200                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                  |                                                                                     |                                                                                     | 25                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.861                                                                             |                                                                                   |                                                                                   | 0.861                                                                             |                                                                                   |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     | 0.993                                                                               |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1787                                                                              | 1620                                                                              | 0                                                                                 | 1787                                                                              | 1620                                                                              | 0                                                                                 | 1787                                                                                | 3539                                                                                | 1599                                                                                | 1787                                                                                | 3516                                                                                | 0                                                                                   |
| Flt Permitted              | 0.689                                                                             |                                                                                   |                                                                                   | 0.697                                                                             |                                                                                   |                                                                                   | 0.187                                                                               |                                                                                     |                                                                                     | 0.048                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1296                                                                              | 1620                                                                              | 0                                                                                 | 1311                                                                              | 1620                                                                              | 0                                                                                 | 352                                                                                 | 3539                                                                                | 1599                                                                                | 90                                                                                  | 3516                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 51                                                                                |                                                                                   |                                                                                   | 53                                                                                |                                                                                   |                                                                                     |                                                                                     | 34                                                                                  |                                                                                     | 10                                                                                  |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 30                                                                                  |                                                                                     |                                                                                     | 30                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 300                                                                               |                                                                                   |                                                                                   | 195                                                                               |                                                                                   |                                                                                     | 1235                                                                                |                                                                                     |                                                                                     | 500                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 6.8                                                                               |                                                                                   |                                                                                   | 4.4                                                                               |                                                                                   |                                                                                     | 28.1                                                                                |                                                                                     |                                                                                     | 11.4                                                                                |                                                                                     |
| Peak Hour Factor           | 0.77                                                                              | 0.77                                                                              | 0.77                                                                              | 0.51                                                                              | 0.51                                                                              | 0.51                                                                              | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                | 0.96                                                                                | 0.96                                                                                | 0.96                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                  | 2%                                                                                  | 1%                                                                                  | 1%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 97                                                                                | 4                                                                                 | 51                                                                                | 29                                                                                | 4                                                                                 | 53                                                                                | 65                                                                                  | 2255                                                                                | 23                                                                                  | 15                                                                                  | 1221                                                                                | 59                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 97                                                                                | 55                                                                                | 0                                                                                 | 29                                                                                | 57                                                                                | 0                                                                                 | 65                                                                                  | 2255                                                                                | 23                                                                                  | 15                                                                                  | 1280                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   | 2                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                  | 100                                                                                 | 20                                                                                  | 20                                                                                  | 100                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                  | 6                                                                                   | 20                                                                                  | 20                                                                                  | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(ft)    |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                     | 94                                                                                  |                                                                                     |                                                                                     | 94                                                                                  |                                                                                     |
| Detector 2 Size(ft)        |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  | Perm                                                                                | pm+pt                                                                               | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   | 6                                                                                   |                                                                                     |                                                                                     |

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| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Detector Phase          | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   | 2                                                                                   | 1                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              |                                                                                   | 20.0                                                                              | 20.0                                                                              |                                                                                   | 8.0                                                                                | 20.0                                                                                | 20.0                                                                                | 8.0                                                                                 | 20.0                                                                                |                                                                                     |
| Total Split (s)         | 24.0                                                                              | 24.0                                                                              |                                                                                   | 24.0                                                                              | 24.0                                                                              |                                                                                   | 8.0                                                                                | 128.0                                                                               | 128.0                                                                               | 8.0                                                                                 | 128.0                                                                               |                                                                                     |
| Total Split (%)         | 15.0%                                                                             | 15.0%                                                                             |                                                                                   | 15.0%                                                                             | 15.0%                                                                             |                                                                                   | 5.0%                                                                               | 80.0%                                                                               | 80.0%                                                                               | 5.0%                                                                                | 80.0%                                                                               |                                                                                     |
| Maximum Green (s)       | 20.0                                                                              | 20.0                                                                              |                                                                                   | 20.0                                                                              | 20.0                                                                              |                                                                                   | 4.0                                                                                | 124.0                                                                               | 124.0                                                                               | 4.0                                                                                 | 124.0                                                                               |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                                | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                                | 0.5                                                                                 | 0.5                                                                                 | 0.5                                                                                 | 0.5                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                                | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                               | C-Max                                                                               | C-Max                                                                               | None                                                                                | C-Max                                                                               |                                                                                     |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                              | 11.0                                                                              |                                                                                   |                                                                                    | 11.0                                                                                | 11.0                                                                                |                                                                                     | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |
| Act Effect Green (s)    | 16.2                                                                              | 16.2                                                                              |                                                                                   | 16.2                                                                              | 16.2                                                                              |                                                                                   | 134.2                                                                              | 132.6                                                                               | 132.6                                                                               | 132.3                                                                               | 128.5                                                                               |                                                                                     |
| Actuated g/C Ratio      | 0.10                                                                              | 0.10                                                                              |                                                                                   | 0.10                                                                              | 0.10                                                                              |                                                                                   | 0.84                                                                               | 0.83                                                                                | 0.83                                                                                | 0.83                                                                                | 0.80                                                                                |                                                                                     |
| v/c Ratio               | 0.74                                                                              | 0.26                                                                              |                                                                                   | 0.22                                                                              | 0.27                                                                              |                                                                                   | 0.19                                                                               | 0.77                                                                                | 0.02                                                                                | 0.12                                                                                | 0.45                                                                                |                                                                                     |
| Control Delay           | 100.1                                                                             | 20.2                                                                              |                                                                                   | 68.3                                                                              | 20.1                                                                              |                                                                                   | 3.7                                                                                | 10.5                                                                                | 1.9                                                                                 | 4.4                                                                                 | 5.9                                                                                 |                                                                                     |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.1                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Delay             | 100.1                                                                             | 20.2                                                                              |                                                                                   | 68.3                                                                              | 20.1                                                                              |                                                                                   | 3.7                                                                                | 10.5                                                                                | 1.9                                                                                 | 4.4                                                                                 | 5.9                                                                                 |                                                                                     |
| LOS                     | F                                                                                 | C                                                                                 |                                                                                   | E                                                                                 | C                                                                                 |                                                                                   | A                                                                                  | B                                                                                   | A                                                                                   | A                                                                                   | A                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   | 71.2                                                                              |                                                                                   |                                                                                   | 36.4                                                                              |                                                                                   |                                                                                    | 10.2                                                                                |                                                                                     |                                                                                     | 5.9                                                                                 |                                                                                     |
| Approach LOS            |                                                                                   | E                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | B                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.77

Intersection Signal Delay: 11.8

Intersection LOS: B

Intersection Capacity Utilization 75.5%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 1: Thompson Bridge & Walmart/Taco Bell

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 s                                                                                 | 128 s                                                                               | 24 s                                                                                | 8 s                                                                                 | 128 s                                                                               | 24 s                                                                                | 8 s                                                                                 | 128 s                                                                               | 24 s                                                                                | 8 s                                                                                   | 128 s                                                                                 | 24 s                                                                                  | 8 s                                                                                   | 128 s                                                                                 | 24 s                                                                                  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 s                                                                                 | 128 s                                                                               | 24 s                                                                                | 8 s                                                                                 | 128 s                                                                               | 24 s                                                                                | 8 s                                                                                 | 128 s                                                                               | 24 s                                                                                | 8 s                                                                                   | 128 s                                                                                 | 24 s                                                                                  | 8 s                                                                                   | 128 s                                                                                 | 24 s                                                                                  |



# Thompson Bridge / Enota Convenience

## 2: Thompson Bridge & Enota

future p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |  |  |  |  |  |  |  |
| Volume (vph)               | 202                                                                               | 96                                                                                | 14                                                                                | 63                                                                                | 58                                                                                | 381                                                                               | 18                                                                                  | 1669                                                                                | 38                                                                                  | 228                                                                                 | 1003                                                                                | 28                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 300                                                                               |                                                                                   | 0                                                                                 | 200                                                                               |                                                                                   | 200                                                                               | 300                                                                                 |                                                                                     | 0                                                                                   | 300                                                                                 |                                                                                     | 0                                                                                   |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (ft)          | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                  |                                                                                     |                                                                                     | 25                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.981                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     | 0.997                                                                               |                                                                                     |                                                                                     | 0.996                                                                               |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1805                                                                              | 1864                                                                              | 0                                                                                 | 1787                                                                              | 1900                                                                              | 1599                                                                              | 1805                                                                                | 3529                                                                                | 0                                                                                   | 1787                                                                                | 3527                                                                                | 0                                                                                   |
| Flt Permitted              | 0.612                                                                             |                                                                                   |                                                                                   | 0.673                                                                             |                                                                                   |                                                                                   | 0.235                                                                               |                                                                                     |                                                                                     | 0.044                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1163                                                                              | 1864                                                                              | 0                                                                                 | 1266                                                                              | 1900                                                                              | 1599                                                                              | 446                                                                                 | 3529                                                                                | 0                                                                                   | 83                                                                                  | 3527                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   |                                                                                   | 173                                                                               |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     | 3                                                                                   |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 30                                                                                  |                                                                                     |                                                                                     | 30                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 160                                                                               |                                                                                   |                                                                                   | 1380                                                                              |                                                                                   |                                                                                     | 173                                                                                 |                                                                                     |                                                                                     | 1235                                                                                |                                                                                     |
| Travel Time (s)            |                                                                                   | 3.6                                                                               |                                                                                   |                                                                                   | 31.4                                                                              |                                                                                   |                                                                                     | 3.9                                                                                 |                                                                                     |                                                                                     | 28.1                                                                                |                                                                                     |
| Peak Hour Factor           | 0.84                                                                              | 0.84                                                                              | 0.84                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.93                                                                                | 0.93                                                                                | 0.93                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 1%                                                                                | 0%                                                                                | 1%                                                                                | 0%                                                                                  | 2%                                                                                  | 1%                                                                                  | 1%                                                                                  | 2%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 240                                                                               | 114                                                                               | 17                                                                                | 70                                                                                | 64                                                                                | 423                                                                               | 19                                                                                  | 1795                                                                                | 41                                                                                  | 248                                                                                 | 1090                                                                                | 30                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 240                                                                               | 131                                                                               | 0                                                                                 | 70                                                                                | 64                                                                                | 423                                                                               | 19                                                                                  | 1836                                                                                | 0                                                                                   | 248                                                                                 | 1120                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                                | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                     | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                     | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                  |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                | 100                                                                               | 20                                                                                | 20                                                                                  | 100                                                                                 |                                                                                     | 20                                                                                  | 100                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                | 6                                                                                 | 20                                                                                | 20                                                                                  | 6                                                                                   |                                                                                     | 20                                                                                  | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(ft)    |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                     | 94                                                                                  |                                                                                     |                                                                                     | 94                                                                                  |                                                                                     |
| Detector 2 Size(ft)        |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | pm+pt                                                                             | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                               | NA                                                                                  |                                                                                     | pm+pt                                                                               | NA                                                                                  |                                                                                     |
| Protected Phases           | 7                                                                                 | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 8                                                                                 | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |

# Thompson Bridge / Enota Convenience

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|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Detector Phase          | 7                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 | 8                                                                                 | 5                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Minimum Split (s)       | 8.0                                                                               | 20.0                                                                              |                                                                                   | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 8.0                                                                                | 20.0                                                                                |                                                                                     | 8.0                                                                                 | 20.0                                                                                |                                                                                     |
| Total Split (s)         | 12.0                                                                              | 46.0                                                                              |                                                                                   | 34.0                                                                              | 34.0                                                                              | 34.0                                                                              | 8.0                                                                                | 91.0                                                                                |                                                                                     | 23.0                                                                                | 106.0                                                                               |                                                                                     |
| Total Split (%)         | 7.5%                                                                              | 28.8%                                                                             |                                                                                   | 21.3%                                                                             | 21.3%                                                                             | 21.3%                                                                             | 5.0%                                                                               | 56.9%                                                                               |                                                                                     | 14.4%                                                                               | 66.3%                                                                               |                                                                                     |
| Maximum Green (s)       | 8.0                                                                               | 42.0                                                                              |                                                                                   | 30.0                                                                              | 30.0                                                                              | 30.0                                                                              | 4.0                                                                                | 87.0                                                                                |                                                                                     | 19.0                                                                                | 102.0                                                                               |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                                | 3.5                                                                                 |                                                                                     | 3.5                                                                                 | 3.5                                                                                 |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                                | 0.5                                                                                 |                                                                                     | 0.5                                                                                 | 0.5                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Lead/Lag                | Lead                                                                              |                                                                                   |                                                                                   | Lag                                                                               | Lag                                                                               | Lag                                                                               | Lead                                                                               | Lag                                                                                 |                                                                                     | Lead                                                                                | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                                | Yes                                                                                 |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              | None                                                                              | None                                                                               | C-Max                                                                               |                                                                                     | None                                                                                | C-Max                                                                               |                                                                                     |
| Walk Time (s)           |                                                                                   | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   | 11.0                                                                              |                                                                                   | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              |                                                                                    | 11.0                                                                                |                                                                                     |                                                                                     | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Act Effect Green (s)    | 41.3                                                                              | 41.3                                                                              |                                                                                   | 29.3                                                                              | 29.3                                                                              | 29.3                                                                              | 92.1                                                                               | 87.8                                                                                |                                                                                     | 110.7                                                                               | 105.9                                                                               |                                                                                     |
| Actuated g/C Ratio      | 0.26                                                                              | 0.26                                                                              |                                                                                   | 0.18                                                                              | 0.18                                                                              | 0.18                                                                              | 0.58                                                                               | 0.55                                                                                |                                                                                     | 0.69                                                                                | 0.66                                                                                |                                                                                     |
| v/c Ratio               | 0.72                                                                              | 0.27                                                                              |                                                                                   | 0.30                                                                              | 0.18                                                                              | 0.98                                                                              | 0.06                                                                               | 0.95                                                                                |                                                                                     | 0.96                                                                                | 0.48                                                                                |                                                                                     |
| Control Delay           | 66.1                                                                              | 47.0                                                                              |                                                                                   | 60.3                                                                              | 56.5                                                                              | 75.0                                                                              | 10.4                                                                               | 38.2                                                                                |                                                                                     | 100.1                                                                               | 10.6                                                                                |                                                                                     |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Delay             | 66.1                                                                              | 47.0                                                                              |                                                                                   | 60.3                                                                              | 56.5                                                                              | 75.0                                                                              | 10.4                                                                               | 38.2                                                                                |                                                                                     | 100.1                                                                               | 10.6                                                                                |                                                                                     |
| LOS                     | E                                                                                 | D                                                                                 |                                                                                   | E                                                                                 | E                                                                                 | E                                                                                 | B                                                                                  | D                                                                                   |                                                                                     | F                                                                                   | B                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   | 59.4                                                                              |                                                                                   |                                                                                   | 71.0                                                                              |                                                                                   |                                                                                    | 37.9                                                                                |                                                                                     |                                                                                     | 26.9                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | E                                                                                 |                                                                                   |                                                                                   | E                                                                                 |                                                                                   |                                                                                    | D                                                                                   |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 41 (26%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.98

Intersection Signal Delay: 40.6

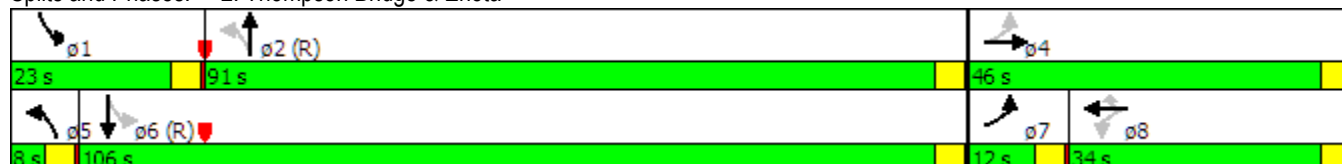
Intersection LOS: D

Intersection Capacity Utilization 92.1%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 2: Thompson Bridge & Enota



Thompson Bridge / Enota Convenience  
3: Riverside & Enota

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| Intersection              |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Intersection Delay, s/veh | 66.5 |      |      |      |      |      |      |      |      |      |      |      |
| Intersection LOS          | F    |      |      |      |      |      |      |      |      |      |      |      |
| Movement                  | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
| Vol, veh/h                | 0    | 73   | 331  | 12   | 0    | 28   | 337  | 116  | 0    | 24   | 363  | 39   |
| Peak Hour Factor          | 0.92 | 0.91 | 0.91 | 0.91 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles, %         | 2    | 1    | 1    | 1    | 2    | 1    | 1    | 1    | 2    | 1    | 1    | 1    |
| Mvmt Flow                 | 0    | 80   | 364  | 13   | 0    | 30   | 366  | 126  | 0    | 25   | 382  | 41   |
| Number of Lanes           | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB | WB   | NB   |
|----------------------------|----|------|------|
| Opposing Approach          | WB | EB   | SB   |
| Opposing Lanes             | 1  | 1    | 1    |
| Conflicting Approach Left  | SB | NB   | EB   |
| Conflicting Lanes Left     | 1  | 1    | 1    |
| Conflicting Approach Right | NB | SB   | WB   |
| Conflicting Lanes Right    | 1  | 1    | 1    |
| HCM Control Delay          | 73 | 72.3 | 72.7 |
| HCM LOS                    | F  | F    | F    |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 6%    | 18%   | 6%    | 38%   |
| Vol Thru, %            | 85%   | 80%   | 70%   | 42%   |
| Vol Right, %           | 9%    | 3%    | 24%   | 20%   |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 426   | 416   | 481   | 166   |
| LT Vol                 | 24    | 73    | 28    | 63    |
| Through Vol            | 363   | 331   | 337   | 70    |
| RT Vol                 | 39    | 12    | 116   | 33    |
| Lane Flow Rate         | 448   | 457   | 523   | 202   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 1     | 1     | 1     | 0.538 |
| Departure Headway (Hd) | 8.305 | 8.379 | 8.228 | 9.569 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 435   | 434   | 444   | 379   |
| Service Time           | 6.37  | 6.431 | 6.28  | 7.571 |
| HCM Lane V/C Ratio     | 1.03  | 1.053 | 1.178 | 0.533 |
| HCM Control Delay      | 72.7  | 73    | 72.3  | 23.2  |
| HCM Lane LOS           | F     | F     | F     | C     |
| HCM 95th-tile Q        | 12.7  | 12.7  | 12.8  | 3.1   |

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**Intersection**

Intersection Delay, s/veh

Intersection LOS

| Movement          | SBU  | SBL  | SBT  | SBR  |
|-------------------|------|------|------|------|
| Vol, veh/h        | 0    | 63   | 70   | 33   |
| Peak Hour Factor  | 0.92 | 0.82 | 0.82 | 0.82 |
| Heavy Vehicles, % | 2    | 1    | 1    | 1    |
| Mvmt Flow         | 0    | 77   | 85   | 40   |
| Number of Lanes   | 0    | 0    | 1    | 0    |

**Approach** SB

|                            |      |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 23.2 |
| HCM LOS                    | C    |

**Lane**

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## Thompson Bridge / Enota Convenience

## 4: GA 11 Bus &amp; South Enota

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|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | NBL                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                               | SBR                                                                               | SEL                                                                                | SET                                                                                 | SER                                                                                 | NWL                                                                                 | NWT                                                                                 | NWR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |  |  |  |
| Volume (vph)               | 19                                                                                | 620                                                                               | 51                                                                                | 112                                                                               | 614                                                                               | 267                                                                               | 247                                                                                | 153                                                                                 | 31                                                                                  | 251                                                                                 | 365                                                                                 | 376                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                               | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 200                                                                               |                                                                                   | 0                                                                                 | 200                                                                               |                                                                                   | 0                                                                                 | 300                                                                                |                                                                                     | 0                                                                                   | 400                                                                                 |                                                                                     | 400                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (ft)          | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                 |                                                                                     |                                                                                     | 25                                                                                  |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.989                                                                             |                                                                                   |                                                                                   | 0.955                                                                             |                                                                                   |                                                                                    | 0.975                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1787                                                                              | 1844                                                                              | 0                                                                                 | 1787                                                                              | 1784                                                                              | 0                                                                                 | 1787                                                                               | 1834                                                                                | 0                                                                                   | 1787                                                                                | 1881                                                                                | 1599                                                                                |
| Flt Permitted              | 0.053                                                                             |                                                                                   |                                                                                   | 0.097                                                                             |                                                                                   |                                                                                   | 0.104                                                                              |                                                                                     |                                                                                     | 0.413                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 100                                                                               | 1844                                                                              | 0                                                                                 | 182                                                                               | 1784                                                                              | 0                                                                                 | 196                                                                                | 1834                                                                                | 0                                                                                   | 777                                                                                 | 1881                                                                                | 1599                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 22                                                                                |                                                                                   |                                                                                    | 6                                                                                   |                                                                                     |                                                                                     |                                                                                     | 389                                                                                 |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 30                                                                                  |                                                                                     |                                                                                     |                                                                                     | 30                                                                                  |
| Link Distance (ft)         |                                                                                   | 494                                                                               |                                                                                   |                                                                                   | 509                                                                               |                                                                                   |                                                                                    | 1007                                                                                |                                                                                     |                                                                                     |                                                                                     | 495                                                                                 |
| Travel Time (s)            |                                                                                   | 11.2                                                                              |                                                                                   |                                                                                   | 11.6                                                                              |                                                                                   |                                                                                    | 22.9                                                                                |                                                                                     |                                                                                     |                                                                                     | 11.3                                                                                |
| Peak Hour Factor           | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.89                                                                              | 0.89                                                                              | 0.89                                                                              | 0.80                                                                               | 0.80                                                                                | 0.80                                                                                | 0.88                                                                                | 0.88                                                                                | 0.88                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 2%                                                                                | 1%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                | 1%                                                                                 | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 21                                                                                | 681                                                                               | 56                                                                                | 126                                                                               | 690                                                                               | 300                                                                               | 309                                                                                | 191                                                                                 | 39                                                                                  | 285                                                                                 | 415                                                                                 | 427                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 21                                                                                | 737                                                                               | 0                                                                                 | 126                                                                               | 990                                                                               | 0                                                                                 | 309                                                                                | 230                                                                                 | 0                                                                                   | 285                                                                                 | 415                                                                                 | 427                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                               | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                    | 12                                                                                  |                                                                                     |                                                                                     |                                                                                     | 12                                                                                  |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     |                                                                                     | 0                                                                                   |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                    | 16                                                                                  |                                                                                     |                                                                                     |                                                                                     | 16                                                                                  |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                 |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                | Right                                                                               |
| Leading Detector (ft)      | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                 | 100                                                                                 |                                                                                     | 20                                                                                  | 100                                                                                 | 20                                                                                  |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Detector 1 Size(ft)        | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                 | 6                                                                                   |                                                                                     | 20                                                                                  | 6                                                                                   | 20                                                                                  |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(ft)    |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                    | 94                                                                                  |                                                                                     |                                                                                     |                                                                                     | 94                                                                                  |
| Detector 2 Size(ft)        |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                    | 6                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                             | NA                                                                                |                                                                                   | pm+pt                                                                              | NA                                                                                  |                                                                                     | pm+pt                                                                               | NA                                                                                  | Free                                                                                |
| Protected Phases           |                                                                                   | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 |                                                                                   | 7                                                                                  | 4                                                                                   |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     |
| Permitted Phases           | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 4                                                                                  |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     | Free                                                                                |

# Thompson Bridge / Enota Convenience

## 4: GA 11 Bus & South Enota

future p.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | NBL                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                               | SBR                                                                               | SEL                                                                                | SET                                                                                 | SER                                                                                 | NWL                                                                                 | NWT                                                                                 | NWR                                                                                 |
| Detector Phase          | 2                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 |                                                                                   | 7                                                                                  | 4                                                                                   |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              |                                                                                   | 8.0                                                                               | 20.0                                                                              |                                                                                   | 8.0                                                                                | 20.0                                                                                |                                                                                     | 8.0                                                                                 | 20.0                                                                                |                                                                                     |
| Total Split (s)         | 78.0                                                                              | 78.0                                                                              |                                                                                   | 14.0                                                                              | 92.0                                                                              |                                                                                   | 27.0                                                                               | 41.0                                                                                |                                                                                     | 27.0                                                                                | 41.0                                                                                |                                                                                     |
| Total Split (%)         | 48.8%                                                                             | 48.8%                                                                             |                                                                                   | 8.8%                                                                              | 57.5%                                                                             |                                                                                   | 16.9%                                                                              | 25.6%                                                                               |                                                                                     | 16.9%                                                                               | 25.6%                                                                               |                                                                                     |
| Maximum Green (s)       | 74.0                                                                              | 74.0                                                                              |                                                                                   | 10.0                                                                              | 88.0                                                                              |                                                                                   | 23.0                                                                               | 37.0                                                                                |                                                                                     | 23.0                                                                                | 37.0                                                                                |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                                | 3.5                                                                                 |                                                                                     | 3.5                                                                                 | 3.5                                                                                 |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                                | 0.5                                                                                 |                                                                                     | 0.5                                                                                 | 0.5                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |
| Lead/Lag                | Lag                                                                               | Lag                                                                               |                                                                                   | Lead                                                                              |                                                                                   |                                                                                   | Lead                                                                               | Lag                                                                                 |                                                                                     | Lead                                                                                | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      | Yes                                                                               | Yes                                                                               |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                                | Yes                                                                                 |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | C-Max                                                                             | C-Max                                                                             |                                                                                   | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                               | None                                                                                |                                                                                     | None                                                                                | None                                                                                |                                                                                     |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              |                                                                                   |                                                                                   | 11.0                                                                              |                                                                                   |                                                                                    | 11.0                                                                                |                                                                                     |                                                                                     | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Act Effect Green (s)    | 75.0                                                                              | 75.0                                                                              |                                                                                   | 88.4                                                                              | 88.4                                                                              |                                                                                   | 60.8                                                                               | 38.3                                                                                |                                                                                     | 57.8                                                                                | 36.6                                                                                | 160.0                                                                               |
| Actuated g/C Ratio      | 0.47                                                                              | 0.47                                                                              |                                                                                   | 0.55                                                                              | 0.55                                                                              |                                                                                   | 0.38                                                                               | 0.24                                                                                |                                                                                     | 0.36                                                                                | 0.23                                                                                | 1.00                                                                                |
| v/c Ratio               | 0.45                                                                              | 0.85                                                                              |                                                                                   | 0.65                                                                              | 0.99                                                                              |                                                                                   | 1.02                                                                               | 0.52                                                                                |                                                                                     | 0.69                                                                                | 0.97                                                                                | 0.27                                                                                |
| Control Delay           | 65.1                                                                              | 48.8                                                                              |                                                                                   | 33.9                                                                              | 61.7                                                                              |                                                                                   | 103.8                                                                              | 56.7                                                                                |                                                                                     | 44.4                                                                                | 96.2                                                                                | 0.4                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 65.1                                                                              | 48.8                                                                              |                                                                                   | 33.9                                                                              | 61.7                                                                              |                                                                                   | 103.8                                                                              | 56.7                                                                                |                                                                                     | 44.4                                                                                | 96.2                                                                                | 0.4                                                                                 |
| LOS                     | E                                                                                 | D                                                                                 |                                                                                   | C                                                                                 | E                                                                                 |                                                                                   | F                                                                                  | E                                                                                   |                                                                                     | D                                                                                   | F                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 49.2                                                                              |                                                                                   |                                                                                   | 58.5                                                                              |                                                                                   |                                                                                    | 83.7                                                                                |                                                                                     |                                                                                     | 46.8                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | E                                                                                 |                                                                                   |                                                                                    | F                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.02

Intersection Signal Delay: 56.6

Intersection LOS: E

Intersection Capacity Utilization 98.1%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 4: GA 11 Bus & South Enota

|                                                                                            |                                                                                            |                                                                                        |                                                                                          |
|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
|  p1     |  p2 (R) |  p3 |  p4 |
| 14 s                                                                                       | 78 s                                                                                       | 27 s                                                                                   | 41 s                                                                                     |
|  p6 (R) |                                                                                            |  p7 |  p8 |
| 92 s                                                                                       |                                                                                            | 27 s                                                                                   | 41 s                                                                                     |

Thompson Bridge / Enota Convenience  
5: Green/Thompson Bridge & Holly & GA 11 Bus

future p.m.

|                            |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBR                                                                               | NBL                                                                               | NBT                                                                               | NBR                                                                               | SBL                                                                               | SBT                                                                                | SBR                                                                                 | SWL                                                                                 | SWR                                                                                 |
| Lane Configurations        |                                                                                   |  |  |  |  |                                                                                   |  |                                                                                     |  |  |
| Volume (vph)               | 0                                                                                 | 37                                                                                | 49                                                                                | 1508                                                                              | 693                                                                               | 0                                                                                 | 872                                                                                | 133                                                                                 | 411                                                                                 | 231                                                                                 |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                               | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Storage Length (ft)        | 0                                                                                 | 0                                                                                 | 150                                                                               |                                                                                   | 200                                                                               | 0                                                                                 |                                                                                    | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Lanes              | 0                                                                                 | 1                                                                                 | 1                                                                                 |                                                                                   | 2                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   | 2                                                                                   | 0                                                                                   |
| Taper Length (ft)          | 25                                                                                |                                                                                   | 25                                                                                |                                                                                   |                                                                                   | 25                                                                                |                                                                                    |                                                                                     | 25                                                                                  |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                              | 0.88                                                                              | 1.00                                                                              | 0.95                                                                               | 0.95                                                                                | 0.97                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.865                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   | 0.980                                                                              |                                                                                     | 0.946                                                                               |                                                                                     |
| Flt Protected              |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     | 0.969                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1644                                                                              | 1805                                                                              | 3574                                                                              | 2814                                                                              | 0                                                                                 | 3507                                                                               | 0                                                                                   | 3357                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   |                                                                                   | 0.200                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     | 0.969                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1644                                                                              | 380                                                                               | 3574                                                                              | 2814                                                                              | 0                                                                                 | 3507                                                                               | 0                                                                                   | 3357                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 134                                                                               |                                                                                   |                                                                                   | 479                                                                               |                                                                                   | 21                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (mph)           | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                 |                                                                                     | 30                                                                                  |                                                                                     |
| Link Distance (ft)         | 497                                                                               |                                                                                   |                                                                                   | 707                                                                               |                                                                                   |                                                                                   | 3085                                                                               |                                                                                     | 595                                                                                 |                                                                                     |
| Travel Time (s)            | 11.3                                                                              |                                                                                   |                                                                                   | 16.1                                                                              |                                                                                   |                                                                                   | 70.1                                                                               |                                                                                     | 13.5                                                                                |                                                                                     |
| Peak Hour Factor           | 0.92                                                                              | 0.58                                                                              | 0.93                                                                              | 0.93                                                                              | 0.93                                                                              | 0.92                                                                              | 0.87                                                                               | 0.87                                                                                | 0.88                                                                                | 0.88                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 1%                                                                                | 1%                                                                                | 0%                                                                                | 1%                                                                                 | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 0                                                                                 | 64                                                                                | 53                                                                                | 1622                                                                              | 745                                                                               | 0                                                                                 | 1002                                                                               | 153                                                                                 | 467                                                                                 | 262                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 64                                                                                | 53                                                                                | 1622                                                                              | 745                                                                               | 0                                                                                 | 1155                                                                               | 0                                                                                   | 729                                                                                 | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                               | Right                                                                               | Left                                                                                | Right                                                                               |
| Median Width(ft)           | 0                                                                                 |                                                                                   |                                                                                   | 12                                                                                |                                                                                   |                                                                                   | 12                                                                                 |                                                                                     | 24                                                                                  |                                                                                     |
| Link Offset(ft)            | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                  |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                 |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                    | 9                                                                                   | 15                                                                                  | 9                                                                                   |
| Number of Detectors        |                                                                                   | 1                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 |                                                                                   | 2                                                                                  |                                                                                     | 1                                                                                   |                                                                                     |
| Detector Template          |                                                                                   | Right                                                                             | Left                                                                              | Thru                                                                              | Right                                                                             |                                                                                   | Thru                                                                               |                                                                                     | Left                                                                                |                                                                                     |
| Leading Detector (ft)      |                                                                                   | 20                                                                                | 20                                                                                | 100                                                                               | 20                                                                                |                                                                                   | 100                                                                                |                                                                                     | 20                                                                                  |                                                                                     |
| Trailing Detector (ft)     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  |                                                                                     | 0                                                                                   |                                                                                     |
| Detector 1 Position(ft)    |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  |                                                                                     | 0                                                                                   |                                                                                     |
| Detector 1 Size(ft)        |                                                                                   | 20                                                                                | 20                                                                                | 6                                                                                 | 20                                                                                |                                                                                   | 6                                                                                  |                                                                                     | 20                                                                                  |                                                                                     |
| Detector 1 Type            |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                |                                                                                     | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                |                                                                                     | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                |                                                                                     | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(ft)    |                                                                                   |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Size(ft)        |                                                                                   |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                  |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                              |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Turn Type                  |                                                                                   | Perm                                                                              | Perm                                                                              | NA                                                                                | Perm                                                                              |                                                                                   | NA                                                                                 |                                                                                     | Prot                                                                                |                                                                                     |
| Protected Phases           |                                                                                   |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                  |                                                                                     | 8                                                                                   |                                                                                     |
| Permitted Phases           |                                                                                   | 4                                                                                 | 2                                                                                 |                                                                                   | 2                                                                                 |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |

Thompson Bridge / Enota Convenience  
5: Green/Thompson Bridge & Holly & GA 11 Bus

future p.m.



| Lane Group              | EBL | EBR   | NBL   | NBT   | NBR   | SBL | SBT   | SBR | SWL   | SWR |
|-------------------------|-----|-------|-------|-------|-------|-----|-------|-----|-------|-----|
| Detector Phase          |     | 4     | 2     | 2     | 2     |     | 6     |     | 8     |     |
| Switch Phase            |     |       |       |       |       |     |       |     |       |     |
| Minimum Initial (s)     |     | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0   |     | 4.0   |     |
| Minimum Split (s)       |     | 20.0  | 20.0  | 20.0  | 20.0  |     | 20.0  |     | 20.0  |     |
| Total Split (s)         |     | 55.0  | 105.0 | 105.0 | 105.0 |     | 105.0 |     | 55.0  |     |
| Total Split (%)         |     | 34.4% | 65.6% | 65.6% | 65.6% |     | 65.6% |     | 34.4% |     |
| Maximum Green (s)       |     | 51.0  | 101.0 | 101.0 | 101.0 |     | 101.0 |     | 51.0  |     |
| Yellow Time (s)         |     | 3.5   | 3.5   | 3.5   | 3.5   |     | 3.5   |     | 3.5   |     |
| All-Red Time (s)        |     | 0.5   | 0.5   | 0.5   | 0.5   |     | 0.5   |     | 0.5   |     |
| Lost Time Adjust (s)    |     | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0   |     | 0.0   |     |
| Total Lost Time (s)     |     | 4.0   | 4.0   | 4.0   | 4.0   |     | 4.0   |     | 4.0   |     |
| Lead/Lag                |     |       |       |       |       |     |       |     |       |     |
| Lead-Lag Optimize?      |     |       |       |       |       |     |       |     |       |     |
| Vehicle Extension (s)   |     | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0   |     | 3.0   |     |
| Recall Mode             |     | None  | C-Max | C-Max | C-Max |     | C-Max |     | None  |     |
| Walk Time (s)           |     | 5.0   | 5.0   | 5.0   | 5.0   |     | 5.0   |     | 5.0   |     |
| Flash Dont Walk (s)     |     | 11.0  | 11.0  | 11.0  | 11.0  |     | 11.0  |     | 11.0  |     |
| Pedestrian Calls (#/hr) |     | 0     | 0     | 0     | 0     |     | 0     |     | 0     |     |
| Act Effect Green (s)    |     | 40.7  | 111.3 | 111.3 | 111.3 |     | 111.3 |     | 40.7  |     |
| Actuated g/C Ratio      |     | 0.25  | 0.70  | 0.70  | 0.70  |     | 0.70  |     | 0.25  |     |
| v/c Ratio               |     | 0.12  | 0.20  | 0.65  | 0.35  |     | 0.47  |     | 0.85  |     |
| Control Delay           |     | 0.5   | 8.9   | 9.6   | 2.0   |     | 29.3  |     | 66.9  |     |
| Queue Delay             |     | 0.0   | 0.0   | 0.9   | 0.0   |     | 0.0   |     | 0.0   |     |
| Total Delay             |     | 0.5   | 8.9   | 10.5  | 2.0   |     | 29.3  |     | 66.9  |     |
| LOS                     |     | A     | A     | B     | A     |     | C     |     | E     |     |
| Approach Delay          |     |       |       | 7.8   |       |     | 29.3  |     | 66.9  |     |
| Approach LOS            |     |       |       | A     |       |     | C     |     | E     |     |

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 23.3

Intersection LOS: C

Intersection Capacity Utilization 67.4%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 5: Green/Thompson Bridge & Holly & GA 11 Bus

|                                                                                            |                                                                                          |
|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
|  p2 (R) |  p4 |
| 105 s                                                                                      | 55 s                                                                                     |
|  p6 (R) |  p8 |
| 105 s                                                                                      | 55 s                                                                                     |



## Thompson Bridge / Enota Convenience

## 6: Green &amp; Ridgewood/driveway

future p.m.

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |                                                                                    |  |                                                                                     |                                                                                     |  |                                                                                     |
| Volume (vph)               | 270                                                                               | 8                                                                                 | 21                                                                                | 12                                                                                | 15                                                                                | 5                                                                                 | 24                                                                                 | 1969                                                                                | 11                                                                                  | 0                                                                                   | 1171                                                                                | 80                                                                                  |
| Ideal Flow (vphpl)         | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                               | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        |                                                                                   | 0.991                                                                             |                                                                                   |                                                                                   | 0.980                                                                             |                                                                                   |                                                                                    | 0.999                                                                               |                                                                                     |                                                                                     | 0.990                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.957                                                                             |                                                                                   |                                                                                   | 0.981                                                                             |                                                                                   |                                                                                    | 0.999                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1802                                                                              | 0                                                                                 | 0                                                                                 | 1827                                                                              | 0                                                                                 | 0                                                                                  | 3568                                                                                | 0                                                                                   | 0                                                                                   | 3541                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.723                                                                             |                                                                                   |                                                                                   | 0.891                                                                             |                                                                                   |                                                                                    | 0.905                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1361                                                                              | 0                                                                                 | 0                                                                                 | 1659                                                                              | 0                                                                                 | 0                                                                                  | 3232                                                                                | 0                                                                                   | 0                                                                                   | 3541                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 5                                                                                 |                                                                                   |                                                                                    | 1                                                                                   |                                                                                     |                                                                                     | 9                                                                                   |                                                                                     |
| Link Speed (mph)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 30                                                                                  |                                                                                     |                                                                                     | 30                                                                                  |                                                                                     |
| Link Distance (ft)         |                                                                                   | 511                                                                               |                                                                                   |                                                                                   | 308                                                                               |                                                                                   |                                                                                    | 511                                                                                 |                                                                                     |                                                                                     | 707                                                                                 |                                                                                     |
| Travel Time (s)            |                                                                                   | 11.6                                                                              |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                    | 11.6                                                                                |                                                                                     |                                                                                     | 16.1                                                                                |                                                                                     |
| Peak Hour Factor           | 0.91                                                                              | 0.91                                                                              | 0.91                                                                              | 0.68                                                                              | 0.68                                                                              | 0.68                                                                              | 0.92                                                                               | 0.92                                                                                | 0.92                                                                                | 0.89                                                                                | 0.89                                                                                | 0.89                                                                                |
| Heavy Vehicles (%)         | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                 | 1%                                                                                  | 0%                                                                                  | 0%                                                                                  | 1%                                                                                  | 0%                                                                                  |
| Adj. Flow (vph)            | 297                                                                               | 9                                                                                 | 23                                                                                | 18                                                                                | 22                                                                                | 7                                                                                 | 26                                                                                 | 2140                                                                                | 12                                                                                  | 0                                                                                   | 1316                                                                                | 90                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 329                                                                               | 0                                                                                 | 0                                                                                 | 47                                                                                | 0                                                                                 | 0                                                                                  | 2178                                                                                | 0                                                                                   | 0                                                                                   | 1406                                                                                | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Right                                                                             | Left                                                                               | Left                                                                                | Right                                                                               | Left                                                                                | Left                                                                                | Right                                                                               |
| Median Width(ft)           |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 12                                                                                  |                                                                                     |                                                                                     | 12                                                                                  |                                                                                     |
| Link Offset(ft)            |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Crosswalk Width(ft)        |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                    | 16                                                                                  |                                                                                     |                                                                                     | 16                                                                                  |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Turning Speed (mph)        | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                |                                                                                   | 9                                                                                 | 15                                                                                 |                                                                                     | 9                                                                                   | 15                                                                                  |                                                                                     | 9                                                                                   |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (ft)      | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                | 100                                                                               |                                                                                   | 20                                                                                 | 100                                                                                 |                                                                                     | 20                                                                                  | 100                                                                                 |                                                                                     |
| Trailing Detector (ft)     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Position(ft)    | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Detector 1 Size(ft)        | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                | 6                                                                                 |                                                                                   | 20                                                                                 | 6                                                                                   |                                                                                     | 20                                                                                  | 6                                                                                   |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(ft)    |                                                                                   | 94                                                                                |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                    | 94                                                                                  |                                                                                     |                                                                                     | 94                                                                                  |                                                                                     |
| Detector 2 Size(ft)        |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                    | 6                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                              | NA                                                                                  |                                                                                     |                                                                                     | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                                | 4.0                                                                                 |                                                                                     | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |

# Thompson Bridge / Enota Convenience

## 6: Green & Ridgewood/driveway

future p.m.

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              |                                                                                   | 20.0                                                                              | 20.0                                                                              |                                                                                   | 8.0                                                                                | 20.0                                                                                |                                                                                     | 20.0                                                                                | 20.0                                                                                |                                                                                     |
| Total Split (s)         | 43.0                                                                              | 43.0                                                                              |                                                                                   | 43.0                                                                              | 43.0                                                                              |                                                                                   | 8.0                                                                                | 117.0                                                                               |                                                                                     | 109.0                                                                               | 109.0                                                                               |                                                                                     |
| Total Split (%)         | 26.9%                                                                             | 26.9%                                                                             |                                                                                   | 26.9%                                                                             | 26.9%                                                                             |                                                                                   | 5.0%                                                                               | 73.1%                                                                               |                                                                                     | 68.1%                                                                               | 68.1%                                                                               |                                                                                     |
| Maximum Green (s)       | 39.0                                                                              | 39.0                                                                              |                                                                                   | 39.0                                                                              | 39.0                                                                              |                                                                                   | 4.0                                                                                | 113.0                                                                               |                                                                                     | 105.0                                                                               | 105.0                                                                               |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                               | 3.5                                                                               |                                                                                   | 3.5                                                                                | 3.5                                                                                 |                                                                                     | 3.5                                                                                 | 3.5                                                                                 |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                               | 0.5                                                                               |                                                                                   | 0.5                                                                                | 0.5                                                                                 |                                                                                     | 0.5                                                                                 | 0.5                                                                                 |                                                                                     |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    | 4.0                                                                                 |                                                                                     |                                                                                     | 4.0                                                                                 |                                                                                     |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Yes                                                                                |                                                                                     |                                                                                     | Yes                                                                                 | Yes                                                                                 |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                               | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               |                                                                                     |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                              | 11.0                                                                              |                                                                                   |                                                                                    | 11.0                                                                                |                                                                                     | 11.0                                                                                | 11.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Act Effect Green (s)    |                                                                                   | 39.0                                                                              |                                                                                   |                                                                                   | 39.0                                                                              |                                                                                   |                                                                                    | 113.0                                                                               |                                                                                     |                                                                                     | 113.0                                                                               |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.24                                                                              |                                                                                   |                                                                                   | 0.24                                                                              |                                                                                   |                                                                                    | 0.71                                                                                |                                                                                     |                                                                                     | 0.71                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 0.99                                                                              |                                                                                   |                                                                                   | 0.12                                                                              |                                                                                   |                                                                                    | 0.95                                                                                |                                                                                     |                                                                                     | 0.56                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 105.1                                                                             |                                                                                   |                                                                                   | 43.0                                                                              |                                                                                   |                                                                                    | 32.4                                                                                |                                                                                     |                                                                                     | 14.5                                                                                |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.2                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 105.1                                                                             |                                                                                   |                                                                                   | 43.0                                                                              |                                                                                   |                                                                                    | 32.4                                                                                |                                                                                     |                                                                                     | 14.6                                                                                |                                                                                     |
| LOS                     |                                                                                   | F                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | C                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   | 105.1                                                                             |                                                                                   |                                                                                   | 43.0                                                                              |                                                                                   |                                                                                    | 32.4                                                                                |                                                                                     |                                                                                     | 14.6                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | F                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | C                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |

### Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.99

Intersection Signal Delay: 32.3

Intersection LOS: C

Intersection Capacity Utilization 101.7%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 6: Green & Ridgewood/driveway

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |  |  |
| 117 s                                                                               |                                                                                     |                                                                                     | 43 s                                                                                |                                                                                     |                                                                                     | 43 s                                                                                |                                                                                     |                                                                                     |
|  |  |  |  |  |  |  |  |  |
| 8 s                                                                                 |                                                                                     |                                                                                     | 109 s                                                                               |                                                                                     |                                                                                     | 43 s                                                                                |                                                                                     |                                                                                     |

Thompson Bridge / Enota Convenience  
7: Thompson Bridge

future p.m.

| Intersection             |        |      |        |      |        |      |
|--------------------------|--------|------|--------|------|--------|------|
| Int Delay, s/veh         | 0.3    |      |        |      |        |      |
|                          |        |      |        |      |        |      |
| Movement                 | EBL    | EBR  | NBL    | NBT  | SBT    | SBR  |
| Vol, veh/h               | 0      | 28   | 37     | 1698 | 1055   | 26   |
| Conflicting Peds, #/hr   | 0      | 0    | 0      | 0    | 0      | 0    |
| Sign Control             | Stop   | Stop | Free   | Free | Free   | Free |
| RT Channelized           | -      | None | -      | None | -      | None |
| Storage Length           | 0      | -    | 0      | -    | -      | -    |
| Veh in Median Storage, # | 0      | -    | -      | 0    | 0      | -    |
| Grade, %                 | 0      | -    | -      | 0    | 0      | -    |
| Peak Hour Factor         | 80     | 80   | 93     | 93   | 92     | 92   |
| Heavy Vehicles, %        | 0      | 0    | 0      | 2    | 2      | 0    |
| Mvmt Flow                | 0      | 35   | 40     | 1826 | 1147   | 28   |
|                          |        |      |        |      |        |      |
| Major/Minor              | Minor2 |      | Major1 |      | Major2 |      |
| Conflicting Flow All     | 2153   | 588  | 1175   | 0    | -      | 0    |
| Stage 1                  | 1161   | -    | -      | -    | -      | -    |
| Stage 2                  | 992    | -    | -      | -    | -      | -    |
| Critical Hdwy            | 6.8    | 6.9  | 4.1    | -    | -      | -    |
| Critical Hdwy Stg 1      | 5.8    | -    | -      | -    | -      | -    |
| Critical Hdwy Stg 2      | 5.8    | -    | -      | -    | -      | -    |
| Follow-up Hdwy           | 3.5    | 3.3  | 2.2    | -    | -      | -    |
| Pot Cap-1 Maneuver       | 42     | 457  | 602    | -    | -      | -    |
| Stage 1                  | 264    | -    | -      | -    | -      | -    |
| Stage 2                  | 324    | -    | -      | -    | -      | -    |
| Platoon blocked, %       |        |      |        | -    | -      | -    |
| Mov Cap-1 Maneuver       | 39     | 457  | 602    | -    | -      | -    |
| Mov Cap-2 Maneuver       | 39     | -    | -      | -    | -      | -    |
| Stage 1                  | 264    | -    | -      | -    | -      | -    |
| Stage 2                  | 302    | -    | -      | -    | -      | -    |
|                          |        |      |        |      |        |      |
| Approach                 | EB     |      | NB     |      | SB     |      |
| HCM Control Delay, s     | 13.5   |      | 0.2    |      | 0      |      |
| HCM LOS                  | B      |      |        |      |        |      |
|                          |        |      |        |      |        |      |
| Minor Lane/Major Mvmt    | NBL    | NBT  | EBLn1  | SBT  | SBR    |      |
| Capacity (veh/h)         | 602    | -    | 457    | -    | -      |      |
| HCM Lane V/C Ratio       | 0.066  | -    | 0.077  | -    | -      |      |
| HCM Control Delay (s)    | 11.4   | -    | 13.5   | -    | -      |      |
| HCM Lane LOS             | B      | -    | B      | -    | -      |      |
| HCM 95th %tile Q(veh)    | 0.2    | -    | 0.2    | -    | -      |      |

**Intersection**

Int Delay, s/veh 1.4

| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
|--------------------------|------|------|------|------|------|------|
| Vol, veh/h               | 267  | 8    | 5    | 99   | 4    | 45   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 84   | 84   | 90   | 90   | 80   | 80   |
| Heavy Vehicles, %        | 1    | 0    | 0    | 1    | 0    | 0    |
| Mvmt Flow                | 318  | 10   | 6    | 110  | 5    | 56   |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |     |
|----------------------|--------|---|--------|---|--------|-----|
| Conflicting Flow All | 0      | 0 | 327    | 0 | 444    | 323 |
| Stage 1              | -      | - | -      | - | 323    | -   |
| Stage 2              | -      | - | -      | - | 121    | -   |
| Critical Hdwy        | -      | - | 4.1    | - | 6.4    | 6.2 |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.4    | -   |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.4    | -   |
| Follow-up Hdwy       | -      | - | 2.2    | - | 3.5    | 3.3 |
| Pot Cap-1 Maneuver   | -      | - | 1244   | - | 575    | 723 |
| Stage 1              | -      | - | -      | - | 738    | -   |
| Stage 2              | -      | - | -      | - | 909    | -   |
| Platoon blocked, %   | -      | - |        | - |        |     |
| Mov Cap-1 Maneuver   | -      | - | 1244   | - | 572    | 723 |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 572    | -   |
| Stage 1              | -      | - | -      | - | 738    | -   |
| Stage 2              | -      | - | -      | - | 904    | -   |

| Approach             | EB | WB  | NB   |
|----------------------|----|-----|------|
| HCM Control Delay, s | 0  | 0.4 | 10.6 |
| HCM LOS              |    |     | B    |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 708   | -   | -   | 1244  | -   |
| HCM Lane V/C Ratio    | 0.087 | -   | -   | 0.004 | -   |
| HCM Control Delay (s) | 10.6  | -   | -   | 7.9   | 0   |
| HCM Lane LOS          | B     | -   | -   | A     | A   |
| HCM 95th %tile Q(veh) | 0.3   | -   | -   | 0     | -   |

# CITY OF GAINESVILLE

## AGENDA REQUEST

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**Date Submitted:** 4/19/2017

**Presenter:** Matt Tate

**Item of Business:** Request from **Gainesville Market, LLC** for a special use on a 5.0± acres tract located west of Shallowford Road within the Gainesville Market Shopping Center (a/k/a **600 Shallowford Road**), having a zoning of General Business (G-B).  
Ward Number: Five  
Tax Parcel Number(s): 01-119C-001-029  
Request: Commercial outdoor recreational facility

**Meeting Date:** 5/9/2017

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**Purpose of Request:**

The applicant is proposing a special use within General Business (G-B) zoning to allow for a commercial outdoor recreational facility to include four soccer fields (three dirt fields and one lighted concrete field). The property is located behind the Gainesville Market Shopping Center within an area that was used as a fairground and for cattle auctions many years ago. The applicant states the hours of operation are Monday thru Thursday from 4:30 P.M. to 9:30 P.M. consisting of 26 to 30 participants and 40 to 50 spectators. Saturday and Sunday hours are from 9:00 A.M. to 10:00 P.M. consisting of 60 to 70 participants and 60 to 80 spectators. Approximately 30 to 40 parking spaces are provided on site and additional parking is located within the adjacent shopping center. Bathrooms are located within the shopping center. Food items are sold during soccer events which are pre-packaged. The adjacent uses include the Army Reserve facility, Target, Gainesville Market Shopping Center, Crowder Signs, wholesale flooring business, real estate office and a single-family home.

**History/Background:**

**Facts & Issues for Consideration:**

**Department Recommendation:**

Planning staff is recommending approval with five conditions.

**Department Director:**

Rusty Ligon

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**If funding is involved, are funds approved within the current budget?**

N/A

**Amount Requested:**

**Source of Funds:**

**Finance Comments:**

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**Administrative Comments:**

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**ATTACHMENTS:**

| Description                            | Type            |
|----------------------------------------|-----------------|
| <input type="checkbox"/> Staff Report  | Report          |
| <input type="checkbox"/> Location Maps | Backup Material |
| <input type="checkbox"/> Narrative     | Backup Material |
| <input type="checkbox"/> Plat          | Backup Material |
| <input type="checkbox"/> Site Plan     | Backup Material |



**GAINESVILLE PLANNING and APPEALS BOARD**  
**STAFF RECOMMENDATION**

**Applicant and Property Owner**..... Gainesville Market, LLC  
**Location**..... 600 Shallowford Road  
**Request**..... Special use within G-B zoning  
**Size** ..... 5.0± acres  
**Ward**..... Five  
**Proposed Use**..... Commercial outdoor recreational facility  
**Planning Division Staff Recommendation** ..... **Approval, with conditions**  
**Date**..... May 9, 2017

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▪ **Applicant's Proposal and Background Information**

The applicant is proposing a special use within General Business (G-B) zoning to allow for a commercial outdoor recreational facility to include four soccer fields (three dirt/grass fields and one lighted concrete field). The property has been used for soccer fields and the applicant was unaware that a special use was required.

The property is located behind the Gainesville Market Shopping Center within a fenced area that was used as a fairground and for cattle auctions many years ago. The applicant states the proposed hours of operation are Monday thru Thursday from 4:30 P.M. to 9:30 P.M. consisting of 26 to 30 participants and 40 to 50 spectators. Saturday and Sunday hours are from 9:00 A.M. to 10:00 P.M. consisting of 60 to 70 participants and 60 to 80 spectators. Approximately 30 to 40 parking spaces are provided on site and additional parking is located within the adjacent shopping center. Bathrooms are located within the shopping center and two portable toilets. Prepackaged food items are sold during soccer events from an onsite mobile vending trailer.

▪ **Adjacent Land Use and Zoning**

| Location | Use                                                             | Zoning                                                                          |
|----------|-----------------------------------------------------------------|---------------------------------------------------------------------------------|
| North    | Target; Real estate office                                      | General Business (G-B) -City                                                    |
| South    | Gainesville Market Shopping Center                              | General Business (G-B) -City                                                    |
| East     | Army Reserve facility                                           | Highway Business (H-B) -County                                                  |
| West     | Single-family homes; Crowder Signs, Wholesale flooring business | Residential-I (R-I), Suburban Shopping (S-S) and Highway Business (H-B) -County |

▪ **Zoning History**

*The following zoning actions have taken place in the immediate area during the last ten years:*

**2017** – A request by Masy Seng to annex a 0.19<sup>±</sup> acre tract located at 593 and 597 Shallowford Road for a donut shop was conditionally approved with General Business (G-B) zoning.

**2006** – A request by Green Street Capital Corporation to annex a 1.053<sup>±</sup> acre tract located at 333 Shallowford Road for a retail center was approved with General Business (G-B) zoning.

▪ **Staff Analysis**

**(1) Is the proposed use suitable in view of the zoning and development of adjacent and nearby property?**

The subject property is located within an established commercial area surrounded by a mixture of mostly non-residential uses. The subject property is unique given its history as an outdoor venue as a fairground and cattle auction. It appears the proposed soccer fields are reasonable given the buffer that surrounds the subject property and its access to the existing shopping center.

**(2) Will the proposed use adversely affect the existing use or usability of adjacent or nearby property?**

For a commercial outdoor recreational facility of this nature, the applicable code standards require a minimum lot area of two acres, vehicular access from a collector or arterial street, 100-foot building setback, 50-foot wide perimeter buffer and an exterior photometric (lighting) plan to enable the evaluation of impacts from illumination. The proposal appears to address these standards except for a photometric plan. The applicant states that Georgia Power has provided two lights for the concrete field and there have been no complaints from adjacent property owners. In addition, the existing parking provided for the use appears to be sufficient between the parking provided on site and the parking available within the adjacent Gainesville Market Shopping Center. It is important that parking for the facility not interfere with the occupants of the adjacent shopping center which include a church, hobby store and a thrift store.

**(3) Is the proposed use compatible with the purpose and intent of the Comprehensive Plan?**

The proposed development appears to be compatible with the Future Development Map of the Comprehensive Plan as the subject property is located within the *Retail/Commercial* land use category. The *Retail/Commercial* land use category includes commercial service activities such as grocery stores, banks, restaurants, theatres, hotels, and automotive related businesses. Commercial uses may be located as a single use in one building or grouped together in a shopping center.

According to the Character Area map for the City of Gainesville, the subject property is located within the *Browns Bridge Corridor* character area. The vision for this area encourages long term activity center nodes at the Memorial Park Drive and Pearl Nix Parkway intersections. Future public space improvements could include better pedestrian facilities and connections. Targeted redevelopment of outdated strip commercial is encouraged. Land uses allowed in the Browns Bridge Corridor are medium-density residential, multi-family residential, mixed-use, commercial, light industrial, and parks / recreation / conservation.

**(4) Are there substantial reasons why the property cannot or should not be used as currently zoned?**

The property is zoned General Business (G-B) which is intended for a mixture of commercial uses. A commercial outdoor recreational center requires special use approval within this zoning district due to potential impacts of additional noise, light and traffic. The subject property appears to be underutilized given its size and proximity to other commercial properties and is prime for redevelopment with the adjacent aging shopping center.



**(5) Will the proposed use cause an excessive or burdensome use of public facilities or services, including but not limited to streets, schools, water or sewer utilities, and police or fire protection?**

It is staff's opinion the proposed outdoor soccer fields should not be burdensome to the existing public facilities or services provided by the City of Gainesville. Numerous public facilities such as water and sewer are readily available. Access to the subject property is from Shallowford Road which is capable of supporting additional traffic from the proposed use.

The subject property is easily accessible from the shopping center for emergency services. The closest fire station is Gainesville Fire Station #1 which is approximately 2.1 miles from the subject property. The Gainesville Police currently patrol the subject property.

Given the non-residential nature of the request there will be no impacts to the school system.

**(6) Is the proposed use supported by new or changing conditions not anticipated by the Comprehensive Plan or reflected in the existing zoning on the property or surrounding properties?**

The Comprehensive Plan expects this property to remain as commercial. It is the opinion of staff that the long term use of the property most likely will not include the commercial outdoor recreational facility, but could include pedestrian green space incorporated as part of a future redevelopment project. The entire shopping center property appears to be suitable for redevelopment as reinvestment has occurred within the immediate area including the Lakeshore Mall property and other commercial properties along Pearl Nix Parkway, Shallowford Road and Browns Bridge Road.

**(7) Does the proposed use reflect a reasonable balance between the promotion of the public health, safety, morality, or general welfare and the right to unrestricted use of property?**

Due to the Comprehensive Land Use Plan and surrounding commercial development, the proposed special use request appears to reflect a reasonable balance between the promotion of the public health, safety, morality, or general welfare and the right to unrestricted use of property.

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▪ **Additional Analysis**

**When considering the Special Use application, the criteria below shall be considered giving due weight or priority to those factors that are appropriate to the circumstances of the proposal:**

**(1) The type of street providing access to the subject property is adequate to serve the proposed Special Use.**

Shallowford Road is adequate to serve the proposed use.

**(2) Access into and out of the property adequately provides for traffic and pedestrian safety, the anticipated volume of traffic flow, and access by emergency vehicles.**

The subject property is accessible through the adjacent shopping center and access design for vehicular and pedestrian safety appears adequate to handle the anticipated traffic and emergency access.

- (3) **Public facilities such as schools, water or sewer utilities, and police or fire protection are adequate to serve the Special Use.**

There is sufficient capacity for water and sewer to serve the proposed use. Bathrooms will be accessible from the shopping center and from portable facilities if needed. Police and fire are capable of providing services to the property and currently serve adjacent properties. Given the non-residential nature of the request there will be no impacts to the school system.

- (4) **Refuse, service, parking and loading areas on the property are located and screened to protect other properties in the area from such adverse effects as noise, light, glare or odor.**

The neighboring properties appear to be sufficiently buffered from the proposed use to protect against any adverse effects such as noise, light, glare or odor. However, the level of noise could fluctuate depending on the number of pedestrians attending the facility.

- (5) **The hours and manner of operation of the Special Use have no adverse effects on other properties in the area.**

The proposed hours of operation are Monday thru Thursday from 4:30 P.M. to 9:30 P.M. and Saturday / Sunday from 9:00 A.M. to 10:00 P.M. The outdoor soccer fields are well hidden behind the existing shopping center and are not visible from Shallowford Road, Pearl Nix Parkway, Skelton Road or Browns Bridge Road.

- (6) **The height, size and location of the buildings or other structures proposed on the property are compatible with the height, size or location of buildings or other structures on neighboring properties.**

There are no buildings proposed for the facility. The location of any portable structure will be required to be sufficiently buffered from all properties excluding the existing shopping center.

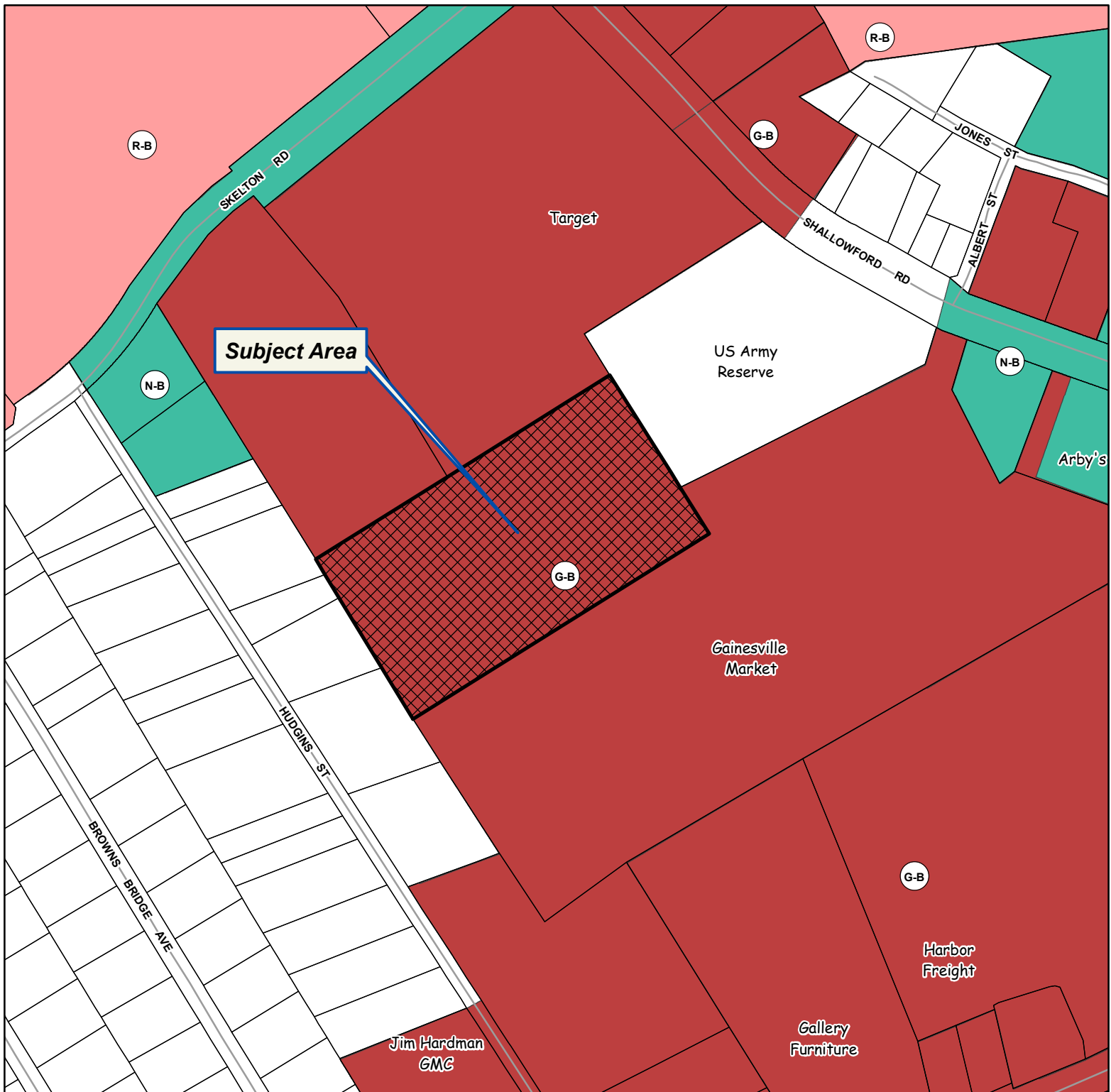
▪ **Staff Recommendation**

The Planning Division staff is recommending **conditional approval** of this special use request based on the Comprehensive Plan and the adjacent non-residential uses.

**Conditions**

1. **The development standards within the narrative, site plan and photographs submitted with the applicant's special use application shall be made part of the special use resolution, and shall be subject to the Community Development Director approval.**
2. **The commercial outdoor recreational facility shall be limited to no more than four soccer fields. The facility hours of operation shall not exceed Monday thru Thursday from 4:30 P.M. to 9:30 P.M. and Saturday / Sunday from 9:00 A.M. to 10:00 P.M.**
3. **The property owner shall maintain a minimum 50-foot wide evergreen vegetated buffer against all adjacent properties excluding the adjacent shopping center to the south. Additional evergreen buffer trees shall be planted within the perimeter buffer area where needed. The spacing, size and type of trees planted shall be subject to Community Development Department Director approval.**

4. The property owner shall provide a photometric plan to evaluate the impacts of the illumination. The outdoor lighting shall meet the standards of Section 9-9-3-14 of the Unified Land Development Code.
5. All parking areas used for the proposed commercial outdoor recreational facility shall be properly maintained. Parking within grass or dirt areas is not permitted. The use of pervious materials within the parking area is subject to review and approval by the Department of Water Resources.



Applicant:

**GAINESVILLE MARKET, LLC**

## SPECIAL USE REQUEST



**Request:**  
Special Use within the General Business (G-B) zoning district for a commercial outdoor recreational facility

**Subject Area Address:**  
600 Shallowford Road

Meeting: 5/9/2017  
Prepared: 4/20/2017

**Gainesville Community Development Department**

 Subject Area

0 150 300 450 600 Feet



1" = 250'

**Tax Parcel:** 01-119C-001-029

Page 1079 of 1120





Applicant:

**GAINESVILLE MARKET, LLC**

**Gainesville Community Development Department**

## SPECIAL USE REQUEST



Subject Area

Aerial from 2015



0 150 300 450 600 Feet

1" = 250'



**Request:**

Special Use within the General Business (G-B) zoning district for a commercial outdoor recreational facility

**Subject Area Address:**

600 Shallowford Road

Meeting: 5/9/2017

Prepared: 4/20/2017

**Tax Parcel: 01-119C-001-029**



Gainesville Market, LLC  
Soccer Fields

Date: March 23, 2017  
RE: 600 Shallowford Rd.

Soccer Fields at 600 Shallowford Road operate on 5 acres of land attached, owned and operated by the shopping center at 622 Shallowford Road. This land has been vacate and unused for many years. The last known use was a cattle auction and fairgrounds.

Our intent is to provide 4 soccer fields for the community. Three grass fields and one concrete field using existing concrete on site. This is providing a great service to our community having positive youth and adult recreational activities within the City of Gainesville.

Hours of operations are currently Monday-Thursday 4:30pm-9:30pm and Saturday and Sunday 9:00am-10:00pm. Monday-Thursday participants are about 26-30 and spectators range from 40-50. On Saturdays participants range from about 60-70 and spectators range from 60-80.

A buffer of 50' around this activity has not been a problem to the adjacent property owners thus far. We would ask for an exception on the 50' buffer between Gainesville Market Shopping Center and the Soccer Field since this is all owned by Gainesville Market, LLC. The other exception we would ask for is between the soccer fields and Army Reserve Facility since this is a similar use.

Restrooms are provided at the Gainesville Market shopping area. We have 2 handicap approved restrooms dedicated for the soccer fields. We also will provide additional portable facilities as needed or required by the City of Gainesville. Outdoor lighting is only provided on the concrete field. GA Power has provided two lights for this field with no complaints from any adjacent owners.

Traffic flow comes off of Shallowford Road and through Gainesville Market Shopping center. Parking area is provided on site with 30-40 spaces available.

Any food items sold on the property during soccer events will be approved by the Hall County Environmental Health Department. The only food and drink items sold will be pre-packaged.

Thank you for your consideration with this opportunity to provide positive activities for our youth and adults within the City of Gainesville.

**NOTES:**  
THIS PROPERTY IS NOT LOCATED WITHIN A  
1000 YEAR FLOOD AREA AS PER FARM FLOOD  
INSURANCE RATE MAP OF CITY OF GANESVILLE,  
FLORIDA, DATED 08/01/2017. 0187 F  
EFFECTIVE DATE: SEPTEMBER 29, 2008  
THIS OPINION IS NOT A CERTIFICATION OF  
FLOOD HAZARD INFORMATION, BUT IS AN  
INTERPRETATION OF THE REFERENCED MAP.  
THE PURPOSE OF THIS REPORT IS TO DETERMINE  
OR ELEVATIONS OF FLOOD HAZARD BOUNDARIES ARE  
NECESSARY, A MORE DETAILED STUDY MAY BE  
REQUIRED. THIS REPORT DOES NOT PROVIDE  
OR LIABILITY FOR THE ACCURACY OF THE REFERENCED  
MAP OR PLANS.  
EQUIPMENT USED FOR MEASUREMENT:  
TOPCON, CTS, B25A  
GPS, EQUIPMENT USED = CHAMBRON TWO GNSS REC  
HORIZONTAL INFORMATION SHOWN HEREON  
WAS OBTAINED FROM THE NATIONAL POSSESSION  
PROCESSED THROUGH THE EOPSS NETWORK  
COMBINED SCALE FACTOR 0.9999997  
HORIZONTAL POSITIONAL ACCURACY  
(60m, North Zone Gauss 12A Plane Coordinates)  
THE FIELD DATA UPON WHICH THIS PLAT IS  
BASED HAS A CLOSURE PRECISION OF THE FOOT  
PER 3.5 MILLION FEET. THE MAXIMUM  
ERROR OF 00'00"01" PER ANGLE UNIT,  
AND WAS ADJUSTED USING LEAST SQUARES  
METHOD.

**REFERENCES:**

1. PLAT BOOK 73, PAGES 270-271
2. GEORGIA D.O.T RIGHT OF WAY PLANS  
PROJECT NO. PRLOP-8600-1 (139)  
(a/k/a SHALLONFORD ROAD), SHEET  
OF 6, DATED NOVEMBER 19, 1986.
3. PLAT BOOK 67, PAGE 160
4. DEED BOOK 4482, PAGE 226
5. DEED BOOK 3862, PAGES 512-519

TRACT "A"  
THIS PLAT HAS BEEN CALCULATED  
FOR CLOSURE AND WAS FOUND TO  
BE ACCURATE WITHIN ONE FOOT  
IN 269,873 FEET.

TRACT "B"  
THIS PLAT HAS BEEN CALCULATED  
FOR CLOSURE AND WAS FOUND TO  
BE ACCURATE WITHIN ONE FOOT  
IN 935,222 FEET.

TRACT "C"  
THIS PIT HAS BEEN CALCULATED  
FOR CLOSURE AND WAS FOUND TO  
BE ACCURATE WITHIN ONE FOOT  
IN 201,628 FEET.

N/E  
DAYTON HUDSON CORPORATION  
P.O. BOX 1013, RICE, LA

TRACT "B" AREA: 5.00 ACRES

TRACT "C" AREA: 0.636 ACRES

| LINE | BEARING       | DISTANCE |
|------|---------------|----------|
| 1.1  | N 51°48'28" E | 60.13    |
| 1.2  | N 51°38'56" E | 44.95    |
| 1.3  | N 67°02'07" E | 48.67    |
| 1.4  | N 51°57'28" E | 170.48   |
| 1.5  | N 63°13'15" E | 62.34    |
| 1.6  | N 69°51'23" E | 49.15    |
| 1.7  | N 74°30'04" E | 41.18    |
| 1.8  | N 32°24'22" E | 33.35    |
| 1.9  | N 32°24'22" E | 33.35    |

N/T  
U.S. GOVERNMENT  
ARMY RESERVE FACILITY  
NO DEED RECORD FOUND

P/L TIE:  
S 48°21'56" W 51.21'  
FROM THE CENTERLINE INTERSECTION  
SHALLOWFORD ROAD AND ALBERT STREET.

Stamped Corner, "A.M.P."  
Patton, RLS No. 2647

**LEGEND:**

- A.C.P. CALCULATED PUMP
- C.P.F. CRUMPED TOP FOUND
- W.B.F. REAR PIN FOUND
- W.B.F. REAR PIN FOUND
- O.T.F. OPEN TOP FOUND
- D.C.F. CONCRETE MONUMENT FOUND
- B.F. BACK OF BOX
- C.L. CENTER LINE
- D.C. DITCH
- C.M.P. CORRUGATED METAL PIPE
- D.B. DEED BOX
- P.C. PINNACLE
- O.P. OVERHEAD POWER LINE
- F.F. FURNACE EXHAUST CONNECTION
- O.F.H. FIRE HYDRANT
- C.M. CULVERT
- W.C. CATCH WATER
- G.W. GAS WATER
- H.C. HIGH CHAIR
- P.V.E. POLYETHYLENE PIPE
- J.B. JUNCTION BOX
- I.S.P. LIGHT POLE
- S.M.H. SINKING DRAIN MANHOLE OR FOUNDATION
- P.F. POWER POLE
- P.F. POWER FOUNDATION BOX
- P.L. PROPERTY LINE
- C.F. CEMENTED CONCRETE PIPE
- R.W. RIGHT OF WAY
- K.C.P. REINFORCED CONCRETE PIPE
- H.C. HIGH CHAIR
- T.R. TELEPHONE RISER
- W.B. WATER MAIN
- M.W. WATER MAIN
- P.K. CONCEALED MAIL
- P.D. POINT ON PLAC
- A.M. AMERICAN UNION LINE
- F.C.F. FIRE DEPARTMENT CONNECTION
- D.B. DEED BOX
- C.D. CONTIGUOUS

**REGISTERED PROFESSIONAL  
LAND SURVEYORS**

**P.O. BOX 256  
GAINESVILLE, GA. 30503**

**PHONE: (770) 532-6492  
FAX: (770) 532-1995**

Chris W. Patton  
GA. Registered Land Surveyor  
No. 2647

RETRACEMENT BOUNDARY SURVEY FOR:  
**GAINESVILLE MARKET, LLC**  
- LOCATED IN -  
AND LOTS 165 AND 170, 9TH LAND DISTRICT  
CITY OF GAINESVILLE  
HALL COUNTY, GEORGIA

[illegible]

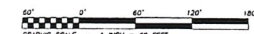
SHEET NUMBER:  
**1 of 1**  
SCALE: 1" = 60'  
SURVEY DATE: 05/29/2014  
PLAT DATE: 05/30/2014  
14-129.dwg  
JN. 14-129

THIS SURVEY WAS NOT PREPARED FROM THE  
AID OF A TITLE SEARCH AND IS SUBJECT  
TO ANY RESTRICTIONS OR EASEMENTS THAT  
MIGHT BE RECORDED.

**STATE WATERS BUFFER:**  
AN UNDISTURBED VEGETATIVE BUFFER MEETING COUNTY  
AND STATE REGULATIONS WILL BE PRESERVED ADJACENT  
TO ALL STREAMS AND LAKES. BUFFER IS TO BE  
MEASURED HORIZONTALLY FROM POINT WHERE  
VEGETATION HAS BEEN WRESTED BY NORMAL STREAM  
FLOW OR WAVE ACTION.

N/T  
ATLANTIC LEASING, LLC  
DILD BOOK 6238, PAGES 572-5

THIS SURVEY WAS PREPARED IN CONFORMITY WITH THE TECHNICAL STANDARDS FOR PROPERTY SURVEYS IN GEORGIA AS SET FORTH IN CHAPTER 180-7 OF THE RULES OF THE GEORGIA BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS AND AS SET FORTH IN THE GEORGIA PLAT ACT O.C.G.A. 15-6-67.

















































# CITY OF GAINESVILLE

## AGENDA REQUEST

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**Date Submitted:** 4/20/2017

**Presenter:** Matt Tate

**Item of Business:** Request from **Manor Lake Development, LLC** for a special use on a 9.24± acres tract located on the northwest side of McEver Road, between Browns Bridge Road and Orchard Brook Drive (a/k/a **2900 McEver Road**), having a zoning of Office and Institutional (O-I) and Residential-I (R-I).  
Ward Number: Four  
Tax Parcel Number(s): 08-022-000-005  
Request: Assisted living facility

**Meeting Date:** 5/9/2017

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**Purpose of Request:**

The applicant is proposing a special use within Office and Institutional (O-I) zoning to establish an 82-unit / 86-bed assisted living and memory care facility. The subject property is located within the Gateway Corridor Overlay Zone, is heavily wooded and contains a creek. The proposed building will be one-story and approximately 60,000 square feet in size. It is anticipated there will be a total of 50 full/part time employees. The proposed facility will access an existing common drive shared with the neighboring "The Fields" apartment complex. The applicant states the proposed location was chosen due to its proximity to Free Chapel Worship Center and Cresswind at Lake Lanier. Adjacent uses include single-family homes, multi-family apartments, Rite Aid, Free Chapel and the Hall County Government Center.

**History/Background:**

**Facts & Issues for Consideration:**

**Department Recommendation:**

Planning staff is recommending approval with five conditions.

**Department Director:**

Rusty Ligon

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**If funding is involved, are funds approved within the current budget?**

N/A

**Amount Requested:**

**Source of Funds:**

**Finance Comments:**

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**Administrative Comments:**

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**ATTACHMENTS:**

| Description                            | Type            |
|----------------------------------------|-----------------|
| <input type="checkbox"/> Staff Report  | Report          |
| <input type="checkbox"/> Location Maps | Backup Material |
| <input type="checkbox"/> Narrative     | Backup Material |
| <input type="checkbox"/> Plat          | Backup Material |
| <input type="checkbox"/> Pictures      | Backup Material |

**GAINESVILLE PLANNING and APPEALS BOARD**  
**STAFF RECOMMENDATION**

**Applicant** ..... Manor Lake Development, LLC  
**Property Owner** ..... Reynolds, Hemmer Properties  
**Location** ..... 2900 McEver Road  
**Request** ..... Special use within O-I zoning  
**Size** ..... 9.24± acres  
**Ward** ..... Four  
**Proposed Use** ..... Assisted living facility  
**Planning Division Staff Recommendation** ..... **Approval, with conditions**  
**Date** ..... May 9, 2017

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▪ **Applicant's Proposal and Background Information**

The applicant is proposing a special use within Office and Institutional (O-I) zoning to establish an 82-unit / 86-bed assisted living and memory care facility. The subject property has a split zoning of Office and Institutional (O-I) consisting of 7.84± acres and a zoning of Residential-I (R-I) consisting of 1.4± acres. The proposed assisted living facility is to be located entirely within the O-I zoned portion of property.

The subject property is located within the Gateway Corridor Overlay Zone, is heavily wooded and contains a creek. The proposed building is one-story and approximately 60,000 square feet in size. It is anticipated there will be a total of 50 full/part time employees. The facility will offer three full meals a day plus healthy snacks, physical therapy, memory therapy, group activities, hair salon, movie room, private dining and other activities. A shuttle will be provided so that residents can go shopping, attend church and visit doctors. The proposed facility will access an existing common drive shared with the neighboring "The Fields" apartment complex. The applicant states the proposed location was chosen due to its proximity to Free Chapel Worship Center and Cresswind at Lake Lanier.

▪ **Adjacent Land Use and Zoning**

| Location | Use                                                             | Zoning                                                                    |
|----------|-----------------------------------------------------------------|---------------------------------------------------------------------------|
| North    | Single-family homes;<br>Rite Aid Pharmacy                       | Residential-I (R-I) -County<br>Planned Unit Development (P-U-D) -City     |
| South    | Multi-family apartments                                         | Residential-II (R-II) and Office and Institutional<br>(O-I) –City         |
| East     | Free Chapel Worship Center;<br>Hall County Government<br>Center | Neighborhood Business (N-B) -City<br>Office and Institutional (O-I) -City |
| West     | Single-family homes                                             | Residential-I (R-I) -County                                               |

▪ **Other Departmental Comments**

According to the Georgia Department of Transportation (GDOT), the development will be required to meet the sight distance requirements and will need to coordinate with GDOT for review and approval.

▪ **Zoning History**

*The following zoning actions have taken place in the immediate area during the last ten years:*

**2016** - A request by Spring Road Group, LLC to annex a 10.06± acre tract located at 2360, 2370, 2374, 2376, 2380, 2400 and 2410 Spring Road was approved with conditional Residential-II (R-II) zoning for a 110-unit active adult community.

**2015** - A request by Ken Chupp to annex a 0.821± acre tract located at 2305, 2313 & 2317 Pine Circle Drive and 2280, 2282 & 2284 Spring Road was approved with Residential-II (R-II) zoning for sewer for three existing duplex homes.

**2015** - A request by Fernando Martinez to annex a 0.24± acre tract located at 2321 Pine Circle Drive for sewer was approved with Residential-I (R-I) zoning.

**2013** - A request by Donald E. Hammond to rezone a 2.59± acres tract located at 3030 McEver Road from Office and Institutional (O-I) to Neighborhood Business (N-B) for office uses was conditionally approved.

**2013** - A request by OK Lake Lanier, LLLP to annex a 76.05± acres tract with Planned Unit Development (P-U-D) zoning located at 3121 Browns Bridge Road and 3110 Montgomery Drive was approved with conditions for a mixed-use planned community for active adults.

**2010** - A request by Rochester & Associates, Inc. to amend a 378.3± acres tract zoned Planned Unit Development (P-U-D) located at 3050 Browns Bridge Road; 3004 Ivey Road and 3113 Scarlet Oak Lane to increase the number of lots within the Cresswind subdivision from 750 to 799 lots and to amend some of the development standards was approved with conditions.

**2010** - A request by Cook's Properties, LLC to rezone 2.91± acres located at 3020 McEver Road from Office and Institutional (O-I) to Neighborhood Business (N-B) for a pest control business was approved with conditions.

**2010** - A request by RaceTrac Petroleum, Inc. to amend a 2.24± acres tract zoned Planned Unit Development (P-U-D) located at 1450 McEver Road to allow internally illuminated free-standing, building and canopy signs for a RaceTrac gas station/convenience store, was approved with conditions.

**2009** - A request by Gainesville Church of God to annex a 3.0± acres tract with Residential-I (R-I) zoning located at 2920 Browns Bridge Road was approved with conditions for an existing church.

**2009** - A request by Raul Castruita to annex a 0.34± acre tract located at 2283 Spring Road for sewer was approved with Residential-I (R-I) zoning.

**2008** - A request by Easlan Capital of Atlanta, Inc. to amend a 10.07± acres tract zoned Planned Unit Development (P-U-D) located at 3050 Browns Bridge Road, 3005 Ivey Road and 3115 Scarlet Oak Lane for commercial/retail space and gas station/convenience store was approved with conditions.

**2007** - A request by Levitt and Sons to amend a 421.126± acres tract zoned Planned Unit Development (P-U-D) located at 3050 and 3245 Browns Bridge Road to reduce the minimum square footage of fifty of the proposed homes was approved with conditions.

**2007** - A request by Sentinel Properties, Inc. to annex a 4.67± acres tract located at 2475 and 2503 Pemmican Run for 56 townhome/condominium units was approved with conditional Planned Unit Development (P-U-D) zoning.

▪ **Staff Analysis**

**(1) Is the proposed use suitable in view of the zoning and development of adjacent and nearby property?**

The proposed 84-unit / 86-bed assisted living facility appears to be suitable based on the adjacent and nearby residential and non-residential development. The surrounding uses consist of a mixture of uses including single-family homes, multi-family apartments, pharmacy and a church.

**(2) Will the proposed use adversely affect the existing use or usability of adjacent or nearby property?**

The proposed use should not adversely affect the existing use or usability of adjacent or nearby property given its location along McEver Road. Assisted living facilities are generally considered low impact uses in regards to any adverse effects such as traffic, noise, light, glare or odor. The adjacent and nearby uses should continue to function at their current levels with limited impacts.

**(3) Is the proposed use compatible with the purpose and intent of the Comprehensive Plan?**

The proposal is consistent with the Comprehensive Plan. The subject property is adjacent to single-family and non-residential uses but appears to be less desirable for single-family development due to its proximity along Thompson Bridge Road.

The Gainesville 2030 Future Development Map for the City of Gainesville places the subject property within the *Mixed Use General* land use category. This category includes areas containing or planned for a mixture of land uses including office, neighborhood retail, and residential.

According to the Character Area map for the City of Gainesville, the subject property is located within the *Suburban Residential* character area. Land uses allowed within this area include low-density residential, medium density residential, multi-family residential, public / institutional, commercial, and parks / recreation / conservation and mixed use. The goal of this character area is to preserve older, stable residential subdivisions and encourage newer projects with smaller lot sizes, pedestrian infrastructure, and buildings patterned after traditional local housing, possibly containing a small neighborhood-serving "village center." Mixed-use neighborhood design is desired but not required. In areas where natural features or sensitive environments are important, cluster housing or conservation subdivision design may be appropriate.

**(4) Are there substantial reasons why the property cannot or should not be used as currently zoned?**

The property is zoned Office and Institutional (O-I) which permits a small assisted living facility serving 18 persons or less, but requires special use approval for a larger facility. The size of the property appears to be suitable for the proposed 84-unit / 86-bed assisted living facility.

**(5) Will the proposed use cause an excessive or burdensome use of public facilities or services, including but not limited to streets, schools, water or sewer utilities, and police or fire protection?**

Various city services including police and fire protection and water utilities serve the adjacent properties. Existing water and sewer services are capable of serving the development. Police and fire protection are currently provided to adjacent properties. The proposed use may generate a higher ratio of emergency calls simply due to the age of the residents. Gainesville Fire Station #4 is located off of Memorial Park Drive and is approximately 2.3± miles from the subject property. Hall County Fire Station # 4 is located only 0.19 miles from the property off of McEver Road.

The proposal would have no impact on the school system given the nature of the use.

The subject property is located along an arterial road which is capable of handling additional traffic. A dedicated southbound right turn lane and a dedicated northbound left turn lane at the median break are currently in place at the entrance to the shared entrance serving the apartment complex. According to the "Trip Generation Manual" as published by the Institute of Transportation Engineers, a 110-unit the assisted living facility could generate an average of 181± new trips per weekday, 13 A.M. peak hour trips and 18 P.M. peak hour trips at full occupancy.

**(6) Is the proposed use supported by new or changing conditions not anticipated by the Comprehensive Plan or reflected in the existing zoning on the property or surrounding properties?**

Much of the surrounding development has occurred over the last 15 years. This is in part due to the fact that McEver Road serves as a main corridor connecting Gainesville, Oakwood and Flowery Branch. Significant development located nearby includes the Free Chapel campus, Hall County Government Center and Cresswind at Lake Lanier active adult community. According to the Comprehensive Plan, properties fronting McEver Road will continue to develop with a mixture of residential, office, institutional and light retail uses.

**(7) Does the proposed use reflect a reasonable balance between the promotion of the public health, safety, morality, or general welfare and the right to unrestricted use of property?**

Due to the Comprehensive Land Use Plan and the compatible surrounding uses, the proposed special use request appears to reflect a reasonable balance between the promotion of the public health, safety, morality, or general welfare and the right to unrestricted use of property.

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▪ **Additional Analysis**

**When considering the Special Use application, the criteria below shall be considered giving due weight or priority to those factors that are appropriate to the circumstances of the proposal:**

**(1) The type of street providing access to the subject property is adequate to serve the proposed Special Use.**

The proposed use will utilize an existing driveway easement shared by the adjacent apartment complex which is adequate to serve the proposed use.

**(2) Access into and out of the property adequately provides for traffic and pedestrian safety, the anticipated volume of traffic flow, and access by emergency vehicles.**

The proposed access design for vehicular and pedestrian safety appears adequate to handle the anticipated traffic and emergency access.

- (3) **Public facilities such as schools, water or sewer utilities, and police or fire protection are adequate to serve the Special Use.**

There is sufficient capacity for water and sewer to serve the proposed use. Gainesville police and fire are capable of providing services to the property and currently serve adjacent properties. The proposal would have no impact on the school system given the nature of the use.

- (4) **Refuse, service, parking and loading areas on the property are located and screened to protect other properties in the area from such adverse effects as noise, light, glare or odor.**

The type of use proposed generally does not create adverse effects to neighboring properties. The development code requires standards to guard against such adverse effects.

- (5) **The hours and manner of operation of the Special Use have no adverse effects on other properties in the area.**

The proposed use will be open 24-hours a day / 7 days a week similar to other assisted living facilities. The proposed location of the assisted living facility should have limited impacts to surrounding properties.

- (6) **The height, size and location of the buildings or other structures proposed on the property are compatible with the height, size or location of buildings or other structures on neighboring properties.**

The proposed building will be one story which is comparable to surrounding single-family structures. There are adjacent and nearby structures that are taller and larger than the proposed structure such as the adjacent apartment complex and the Free Chapel Worship Center.

▪ **Staff Recommendation**

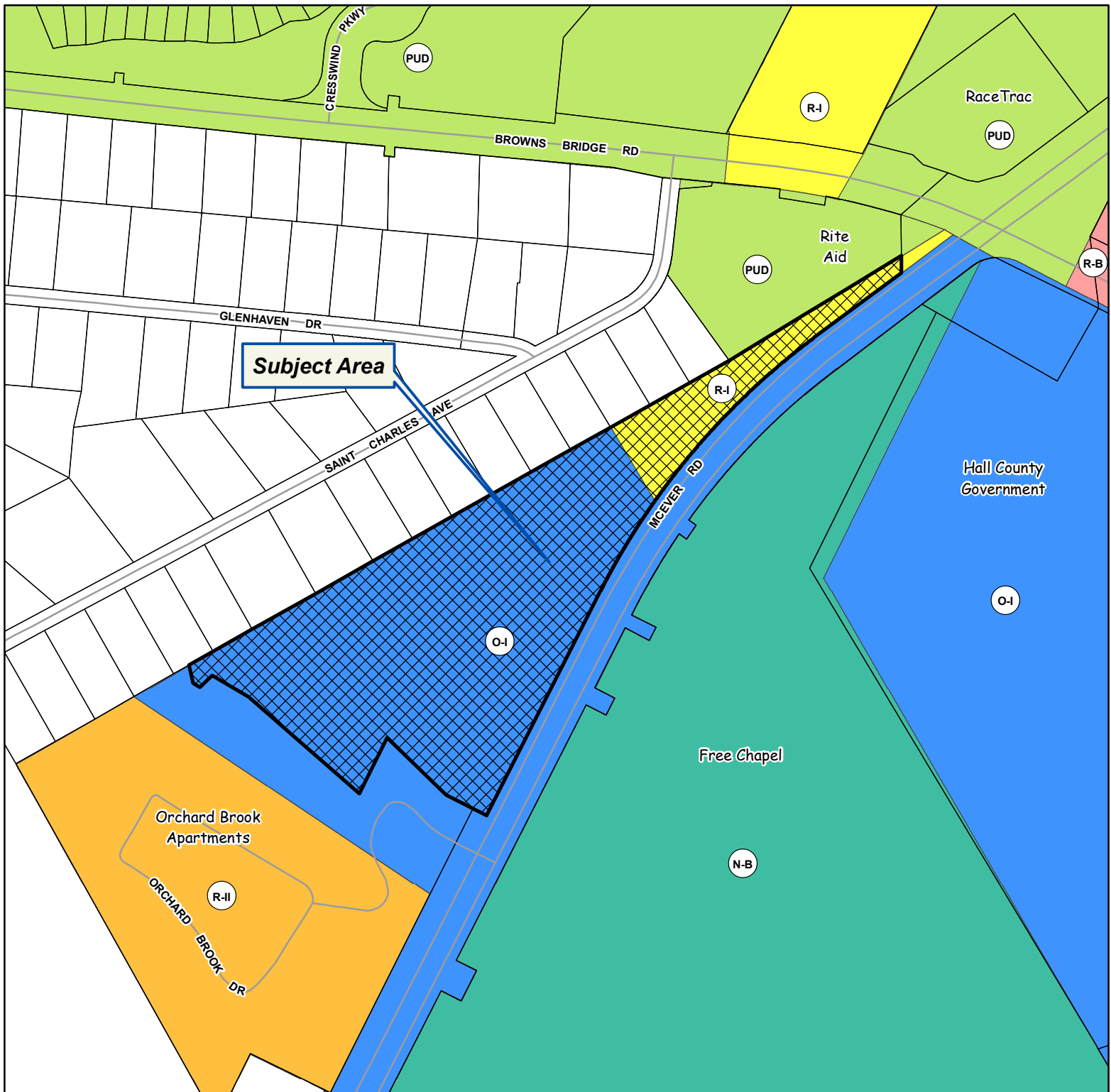
The Planning Division staff is recommending **conditional approval** of this special use request based on the Comprehensive Plan and the adjacent non-residential uses.

**Conditions**

1. The development standards within the narrative, site plan and photographs submitted with the applicant's special use application shall be made part of the special use resolution, and shall be subject to the Community Development Director approval.
2. The subject property shall be limited to the proposed 86-bed assisted living facility and those uses permitted within the Office and Institutional (O-I) zoning district only.
3. The developer shall provide a minimum 25-foot wide evergreen vegetated buffer along the property lines adjacent to the single-family properties. Additional evergreen buffer trees shall be planted within the perimeter buffer area where needed. The intent of the buffer is to supplement the existing vegetation with buffer trees to provide for an effective buffer. The spacing, size and type of trees planted shall be subject to Community Development Department Director approval.



4. All access point design must be reviewed and approved by the Gainesville Public Works Director. Any required traffic improvements associated with the proposed development shall be at the full expense of the developer/property owner.
5. An updated as-built survey/plat of the subject property, indicating existing conditions and all improvements shall be recorded prior to obtaining a Certificate of Occupancy for the future use.



Applicant:

**MANOR LAKE DEVELOPMENT, LLC**

## SPECIAL USE REQUEST



**Request:**  
Special Use within the Office and Institutional (O-I) and Residential-I (R-I) zoning districts for an assisted living facility

**Subject Area Address:**  
2900 McEver Road

Meeting: 5/9/2017

Prepared: 4/20/2017

**Gainesville Community Development Department**

 Subject Area

0 180 360 540 720 Feet



1" = 300'

**Tax Parcel:** 08-022-000-005





Applicant:

**MANOR LAKE DEVELOPMENT, LLC**

## SPECIAL USE REQUEST



**Request:**  
Special Use within the Office and Institutional (O-I) and Residential-I (R-I) zoning districts for an assisted living facility

**Subject Area Address:**  
2900 McEver Road

**Meeting:** 5/9/2017

**Prepared:** 4/20/2017

**Gainesville Community Development Department**

 Subject Area

Aerial from 2015

0 180 360 540 720 Feet



1" = 300'

**Tax Parcel:** 08-022-000-005



# Manor Lake Development, LLC

Senior Communities

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Manor Lake Development, LLC, a Georgia real estate development company, proposes to build an approximately 82 unit, 86-bed Assisted Living and Memory Care facility in Gainesville, GA. The legal address for the site in interest is 2900 McEver Rd and consists of 9.24 acres. We are requesting a special use within the Office and Industrial (O-I) for the proposed use. The main purpose of this community is to provide world-class living and care for senior residents in the area. Most, if not all, of these residents will pull from many surrounding locations. One-quarter mile north is the 1,000-home Cresswind at Lake Lanier, a 55+ senior development. Many current independent residents in this mega development will one day need assisted care, or at the very least their spouse. Our site is primed to be an excellent next step for those who want to stay close to their former home or admitted loved one. Directly across the street from us is Free Chapel, one of the largest churches in Georgia. There will be many parents and grandparents who will need extended care, but who will also enjoy the convenience of living so close to the congregation they are imbedded in. Lastly, there are a number of affluent neighborhoods in the area and on Lake Lanier that support a wealthier median income to afford Assisted Living/Memory Care boarding.

Our facility will have 50 full time/part time employees with 24-hour services for our residents. We will offer 3 full meals a day plus healthy snacks, physical therapy, memory therapy, group activities, hair salon, movie room, private dining, and many other amenities. A shuttle will be provided for residents so that they can go shopping at local stores, attend church, and visit doctors. The facility will be a one-story structure at roughly 60,000 sq/ft, thus giving ease in not forcing residents to navigate elevators to get to their dining and activities. The façade will be roughly 50% stone and brick, giving a lodge type feel. Inside will be a double-sided stone fireplace that can be seen from both the lobby and the large dining room.

This proposed facility already has a dedicated entrance that is shared with Oak Brook Apartments at Oak Brook Drive off of McEver Rd. Due to the fact that the facility is open 24 hours with employees in shifts, and residents will not have vehicles, there will be a low impact on the current traffic on McEver Rd. Utilities are already on-site, and this type of development will have little to no impact on city and county services, and no impact on schools. We will be charging market rate rents, which will provide a boost to the tax base for the city and county. Given demographic studies in the area, there is a great need for a quality, well-positioned Assisted Living/Memory Care operation in Gainesville, GA and we believe this site is best suited for it.

LINEAR ERROR OF CLOSURE AS  
COMPUTED FROM FIELD DATA IS  
1 FOOT IN 25000 FEET.

ANGULAR ERROR OF CLOSURE IS  
.04" PER ANGLE POINT  
BEFORE ADJUSTMENT.

THIS PLAT HAS BEEN CALCULATED FOR  
CLOSURE AND IS FOUND TO BE ACCURATE  
TO WITHIN 1 FOOT IN 100000 FEET.

EQUIPMENT USED:  
NIKON DTM-420/EDM

| COURSE | BEARING      | DISTANCE |
|--------|--------------|----------|
| L-1    | N 60°36'57"E | 59.93'   |
| L-2    | N 60°48'30"E | 100.63'  |
| L-3    | N 60°23'38"E | 99.79'   |
| L-4    | N 60°36'31"E | 199.75'  |
| L-5    | N 60°39'28"E | 99.80'   |
| L-6    | N 60°37'17"E | 100.16'  |
| L-7    | N 55°52'04"W | 70.00'   |
| L-8    | S 33°39'37"W | 32.39'   |
| L-9    | S 58°48'41"E | 70.00'   |
| L-10   | N 62°57'14"W | 65.44'   |
| L-11   | S 27°02'46"W | 136.75'  |
| L-12   | N 59°29'04"W | 92.83'   |
| L-13   | S 47°12'56"W | 36.87'   |
| L-14   | N 59°57'09"W | 17.53'   |
| L-15   | N 11°27'43"W | 41.09'   |

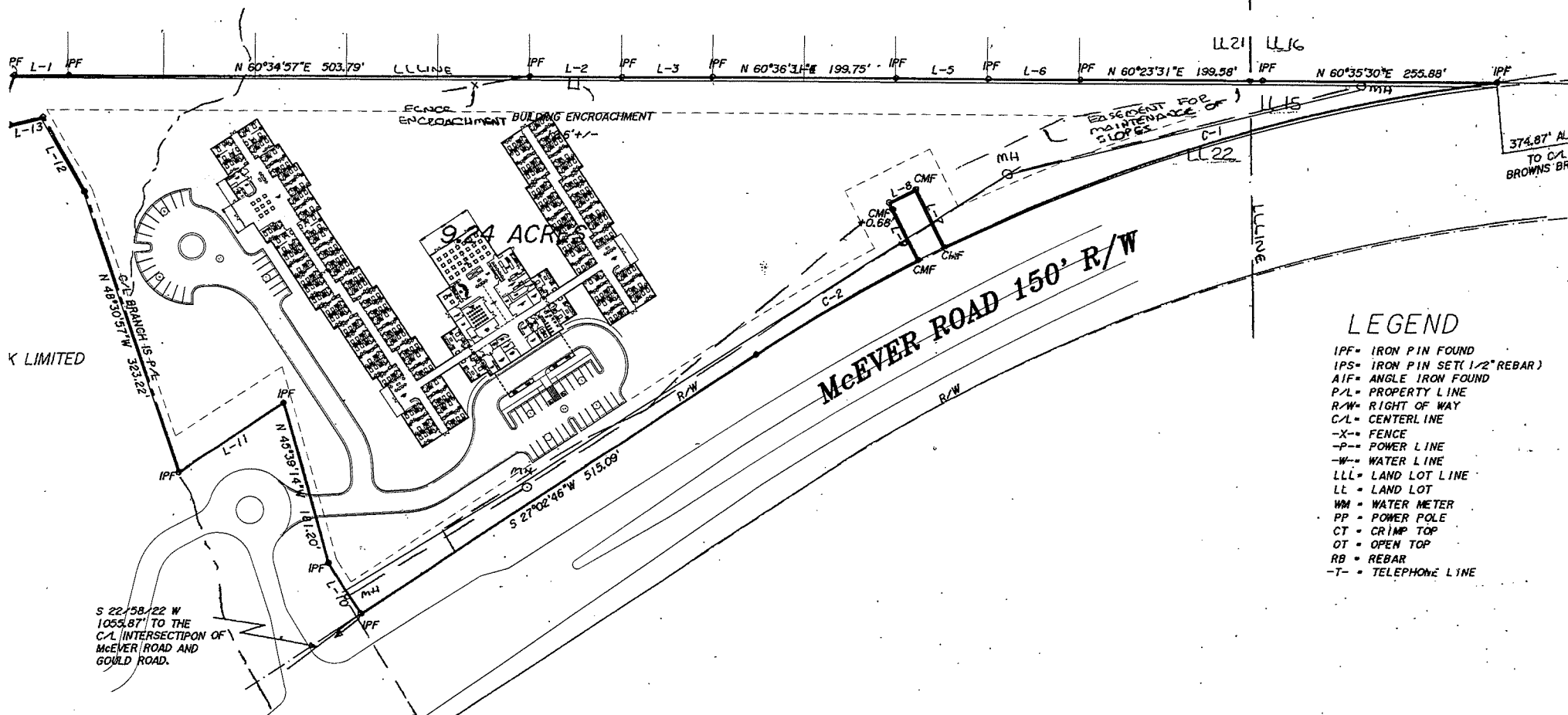
TO WHOM IT MAY CONCERN:  
THIS PROPERTY IS NOT LOCATED  
IN A FLOOD HAZARD AREA.

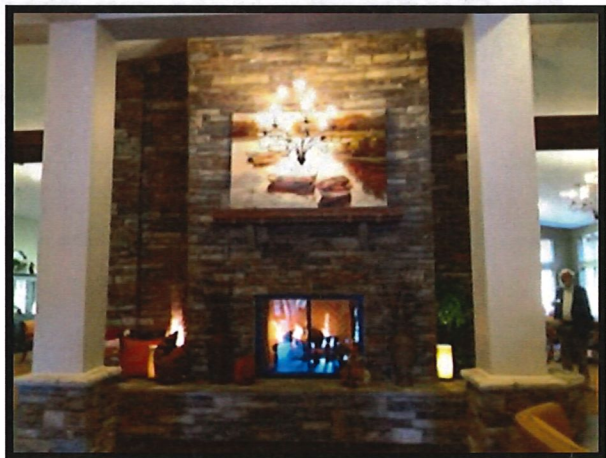
THIS PLAT WAS PREPARED  
WITHOUT THE BENEFIT OF  
A TITLE SEARCH AND IS  
SUBJECT TO ANY AND ALL  
DISCLOSURES THAT A TITLE  
SEARCH MAY PRODUCE.

THIS SURVEY IS SUBJECT TO ANY AND ALL  
EASEMENTS, R/W S, ETC., OF RECORD AND  
NOT OF RECORD, ABOVE OR BELOW GROUND:

| CURVE | RADIUS   | LENGTH  | CHORD   | CH. BEARING  |
|-------|----------|---------|---------|--------------|
| C-1   | 1896.39' | 631.89' | 628.97' | S 43°40'40"W |
| C-2   | 1896.39' | 203.30' | 203.20' | S 30°07'02"W |

PINE VALLEY SUBDIVISION BLOCK D





# CITY OF GAINESVILLE

## AGENDA REQUEST

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**Date Submitted:** 4/20/2017

**Presenter:** Matt Tate

**Item of Business:** Request from **Carriage North, LLC** for a special use on a 0.71± acre tract located on the southwest side of the terminus of Corporate Drive, west of Browns Bridge Road (a/k/a **2425 Corporate Drive**), having a zoning of General Business (G-B).

Ward Number: Five

Tax Parcel Number(s): 08-007-001-042

Request: Helipad

**Meeting Date:** 5/9/2017

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### **Purpose of Request:**

The applicant is proposing a special use within General Business (G-B) zoning to permit a helipad. The location of the helipad is within an overflow parking area adjacent to Carriage Nissan, at the end of Corporate Drive and is periodically used for this purpose. The helipad is required to be secured by a chain link fence and locking gate. According to the applicant, there will be less than ten helicopter takeoffs and landings each month during normal business hours of 9:00 A.M. and 6:00 P.M. The helicopter is used by the owner of Carriage Auto (David Basha), and will be piloted by Blue Ridge helicopters, Inc. Adjacent uses include a church, various auto sale and service uses and undeveloped land. Nearby residential uses include "The Pines of Lanier" apartment complex located approximately 600-feet to the east of the subject property.

### **History/Background:**

### **Facts & Issues for Consideration:**

### **Department Recommendation:**

Planning staff is recommending approval with six conditions.

### **Department Director:**

Rusty Ligon

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### **If funding is involved, are funds approved within the current budget?**

N/A

### **Amount Requested:**

### **Source of Funds:**

### **Finance Comments:**

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### **Administrative Comments:**

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### **ATTACHMENTS:**

| Description                                                | Type            |
|------------------------------------------------------------|-----------------|
| <input type="checkbox"/> Staff Report                      | Report          |
| <input type="checkbox"/> Location Maps                     | Backup Material |
| <input type="checkbox"/> Narrative                         | Backup Material |
| <input type="checkbox"/> Concept Plan                      | Backup Material |
| <input type="checkbox"/> Aerial Map                        | Backup Material |
| <input type="checkbox"/> Certificate of Aircraft Insurance | Backup Material |
| <input type="checkbox"/> Pictures                          | Backup Material |



**GAINESVILLE PLANNING and APPEALS BOARD  
STAFF RECOMMENDATION**

**Applicant and Property Owner**..... Carriage North, LLC  
**Location**..... 2425 Corporate Drive  
**Request**..... Special use within G-B zoning  
**Size** ..... 0.71± acre  
**Ward**..... Five  
**Proposed Use**..... Helipad  
**Planning Division Staff Recommendation** ..... **Approval, with conditions**  
**Date**..... May 9, 2017

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▪ **Applicant's Proposal and Background Information**

The applicant is proposing a special use within General Business (G-B) zoning to allow for a helipad which is considered an aircraft landing area by the Unified Land Development Code. The location of the helipad is within an overflow parking area adjacent to Carriage Nissan, at the end of Corporate Drive and is periodically used for this purpose. The helipad is required to be secured by a chain link fence and locking gate. According to the applicant, there will be less than ten helicopter takeoffs and landings each month during normal business hours of 9:00 A.M. and 6:00 P.M. The helicopter is used by the owner of Carriage Auto (David Basha), and will be piloted by Blue Ridge Helicopters, Inc.

According to the Unified Land Development Code the below six requirements should be met when considering the use of a private heliport. The proposal appears to meet the following requirements excluding items (d) and (f). The subject property is not fully enclosed by a minimum 3-foot tall fence, wall or hedge. As well, the property is located within 600 feet of a residentially zoned district but is approximately 650 feet from the nearest residential use.

- (a) No person shall use or authorize the use of an aircraft landing area on any property owned, leased, or controlled by such person until such person has obtained liability insurance coverage on the operation and use of such area. Such coverage shall be obtained from an insurer authorized or licensed to transact insurance business in Georgia and shall provide a minimum liability coverage of at least \$500,000 per claim.
- (b) The proposed aircraft landing area shall be of sufficient size to meet the Federal Aviation Administration requirements for the class of airport or aircraft landing proposed, and it must be approved by the Federal Aviation Administration or other agency of the federal government with jurisdiction. There shall be sufficient distance between the end of each landing strip and the property boundary to satisfy the requirements of the Federal Aviation Administration.
- (c) There shall be no existing or proposed flight obstructions such as towers, chimneys or natural obstructions outside the proposed aircraft landing area which would be in the approach zone to any of the proposed runways, landing strips, or landing areas. In cases where air rights or easements have been acquired from the owners of abutting properties to protect approach zones, satisfactory evidence thereof shall be submitted with the application.

- (d) The owner of the aircraft landing area shall erect a safety barrier around the peripheral area surrounding the takeoff and landing area. The safety barrier shall be a fence, wall or hedge no less than three (3) feet in height and fully enclosed with a self-locking gate.
- (e) An environmental impact report shall be submitted, addressing whether the facility is consistent with the comprehensive plan; whether the use will have an adverse impact on the surrounding area; and whether the noise level will impact the surrounding area. Additionally, the applicant shall submit a plan with any mitigation techniques that may be required. The Community Development Director shall review the environmental impact report, evaluate proposed mitigating techniques, and determine the sufficiency thereof, require any additional information relevant to the application, and make a recommendation to the Governing Body regarding approval or denial of the special use application.
- (f) In approving an aircraft landing area, the Governing Body may provide that the approval is conditioned on measures or restrictions designed to mitigate any negative impacts of the use. The proposed location of an aircraft landing area within six-hundred (600) feet of a residential zoning district or existing residential use may form the basis for denial of the application.

▪ **Adjacent Land Use and Zoning**

Adjacent uses include a church, various auto sale and service uses and undeveloped land. Nearby residential uses include “The Pines of Lanier” apartment complex located approximately 650±-feet to the east of the subject property.

| Location | Use                           | Zoning                                        |
|----------|-------------------------------|-----------------------------------------------|
| North    | Undeveloped Land              | Residential-I-A (R-I-A) -City                 |
| South    | Vacant Land; Church           | Agricultural Residential-III (AR-III) -County |
| East     | Auto Repair; Auto Storage Lot | General Business (G-B) -City                  |
| West     | Undeveloped Land              | Residential-I-A (R-I-A) -City                 |

▪ **Zoning History**

*The following zoning actions have taken place in the immediate area during the last ten years:*

**2015** – A request by the Roman Catholic Archdiocese of Atlanta to amend a 14.233± acres tract located at 2436 S Smith Road zoned Planned Unit Development (P-U-D) was conditionally approved for a church.

**2015** – A request by the Roman Catholic Archdiocese of Atlanta to amend and rezone a 4.899± acres tract located at 0 S Smith Road from Residential-I (R-I) to Planned Unit Development (P-U-D) was conditionally approved for a church.

**2013** – A request by Foote & Miller Properties, LLC to annex a 2.72<sup>±</sup> acres tract located at 2420 Browns Bridge Road was approved with General Business (G-B) zoning for sewer for an existing auto dealership.

**2012** – A request by Rescate 2000, Inc. for a special use on a 8.19<sup>±</sup> acres tract located at 2920 Florence Drive was approved with conditional Office and Institutional (O-I) zoning for a daycare center.

**2010** – A request by Jose Delagarza to annex a 0.33<sup>±</sup> acre tract located at 3 Cherry Circle was approved with conditional Residential-I (R-I) zoning for sewer for an existing single-family residence.

**2009** – A request by Car Store of Gainesville to annex a 0.45<sup>±</sup> acre tract located at 2650 Browns Bridge Road was approved with conditional General Business (G-B) zoning for an auto sales facility.

**2009** – A request by Gainesville Church of God to annex a 3.0<sup>±</sup> acres tract located at 2920 Browns Bridge Road was approved with Residential-I (R-I) zoning for an existing church.

**2008** – A request by Wayne Clark and Associates to annex and rezone a 2.48<sup>±</sup> acres tract located at 2484 S Smith Road from Agricultural Residential-III (AR-III) to General Business (G-B) for a retail center was approved with conditions.

**2008** – A request by Trinity Presbyterian Church to rezone a 2.185<sup>±</sup> acres tract located at 2023 Memorial Park Drive from Residential-I (R-I) to General Business (G-B) was approved with conditions for an existing church and a new larger monument sign.

**2007** – A request by Kwang Jung to annex a 2.12<sup>±</sup> acres tract located at 2800 Browns Bridge Road was approved with conditions with General Business (G-B) zoning for an auto repair / office.

▪ **Staff Analysis**

**(1) Is the proposed use suitable in view of the zoning and development of adjacent and nearby property?**

The subject property is located within a heavy commercial area off of Browns Bridge Road. Multi-family apartments are located to the northeast off of Pine Cove Circle and single-family residential homes are located to the southwest off of Browns Bridge Road. While there are residentially zoned properties adjacent to the subject property, the closest residential structure is located approximately 650<sup>±</sup> feet to the east within the Pines of Lanier apartment complex which is zoned Light Industrial (L-I).

The proposed use is unique in that there are no zoning districts within the city limits that inherently allow for a helipad without special use approval. Presently, there are two known helipads within the city limits located at Lee Gilmer Airport and Northeast Georgia Medical Center.

**(2) Will the proposed use adversely affect the existing use or usability of adjacent or nearby property?**

The primary impact created by the proposed use will be noise created and debris disturbed by the helicopter upon landing and taking off from the helipad. The applicant has stated that flight paths will avoid the nearby apartment complex to reduce noise impacts. According to the applicant there will be less than 10 helicopter landings and takeoffs each month during normal business hours.

**(3) Is the proposed use compatible with the purpose and intent of the Comprehensive Plan?**

The subject property is located within the *Retail/Commercial* land use category which includes commercial service activities such as grocery stores, banks, restaurants, theatres, hotels, and automotive related businesses. Commercial uses may be located as a single use in one building or grouped together in a shopping center.

According to the Character Area map for the City of Gainesville, the subject property is located within the *Browns Bridge Corridor* character area. The vision for this area encourages long term activity center nodes at the Memorial Park Drive and Pearl Nix Parkway intersections. Future public space improvements could include better pedestrian facilities and connections. Targeted redevelopment of outdated strip commercial is encouraged. Land uses allowed in the Browns Bridge Corridor are medium-density residential, multi-family residential, mixed-use, commercial, light industrial, and parks / recreation / conservation. The use of a helipad is not specifically mentioned within the Comprehensive Plan.

**(4) Are there substantial reasons why the property cannot or should not be used as currently zoned?**

The property is zoned General Business (G-B) which is intended for a mixture of commercial uses. The proposed helipad will be secondary to the primary use of the property which is a parking lot used to store vehicles for sale for Carriage Auto. If the request were denied, the existing parking lot could continue to be used for the parking of vehicles. The applicant states the parking lot is seldom full and sufficient free space is generally available for a helicopter landing.

**(5) Will the proposed use cause an excessive or burdensome use of public facilities or services, including but not limited to streets, schools, water or sewer utilities, and police or fire protection?**

The proposed use should have no impacts on streets, schools, water or sewer utilities, and police or fire protection. The subject property is easily accessible from Corporate Drive for emergency services. The closest fire station is Gainesville Fire Station #4 which is approximately 1.4 miles from the subject property off of Memorial Park Drive. The Gainesville Police currently patrol the subject property.

**(6) Is the proposed use supported by new or changing conditions not anticipated by the Comprehensive Plan or reflected in the existing zoning on the property or surrounding properties?**

The Comprehensive Plan expects this property to remain as commercial including much of the property located along Browns Bridge Road. Property to the north between Browns Bridge Road and McEver Road is seen as *Mixed-Use General* and *Medium-High Residential*.

**(7) Does the proposed use reflect a reasonable balance between the promotion of the public health, safety, morality, or general welfare and the right to unrestricted use of property?**

Due to the adjacent and nearby commercial development and the property's distance from existing residential uses, the proposed special use request appears to reflect a reasonable balance between the promotion of the public health, safety, morality, or general welfare and the right to unrestricted use of property.

▪ **Additional Analysis**

When considering the Special Use application, the criteria below shall be considered giving due weight or priority to those factors that are appropriate to the circumstances of the proposal:

- (1) **The type of street providing access to the subject property is adequate to serve the proposed Special Use.**

The proposed use is located off of Corporate Drive which is adequate to serve the proposed use.

- (2) **Access into and out of the property adequately provides for traffic and pedestrian safety, the anticipated volume of traffic flow, and access by emergency vehicles.**

The proposed use will not impact the vehicular traffic volumes within the immediate area. The helipad is required to be fenced with locking gate which will protect any unauthorized pedestrians from entering the landing area. The helipad location is accessible from Corporate Drive for emergency vehicles.

- (3) **Public facilities such as schools, water or sewer utilities, and police or fire protection are adequate to serve the Special Use.**

There will be little to no impacts to public facilities given the nature of the request. Police and fire are capable of providing services to the property and currently serve adjacent properties.

- (4) **Refuse, service, parking and loading areas on the property are located and screened to protect other properties in the area from such adverse effects as noise, light, glare or odor.**

The neighboring properties located off of Corporate Drive are auto sales/repair businesses which are owned by the applicant and the neighboring Milton Martin Honda. The proposed location of the helipad appears to be reasonable given its location at the end of Corporate Drive. However, the adjacent uses will still be impacted by the noise created and possible debris disturbed from the helicopter.

- (5) **The hours and manner of operation of the Special Use have no adverse effects on other properties in the area.**

According to the applicant there will be no more than 10 takeoffs and landings a month between the hours of 9:00 A.M. and 6:00 P.M. In addition, the applicant states the flight pattern will be over wooded areas so as to minimize impacts of noise on the nearby apartment complex.

- (6) **The height, size and location of the buildings or other structures proposed on the property are compatible with the height, size or location of buildings or other structures on neighboring properties.**

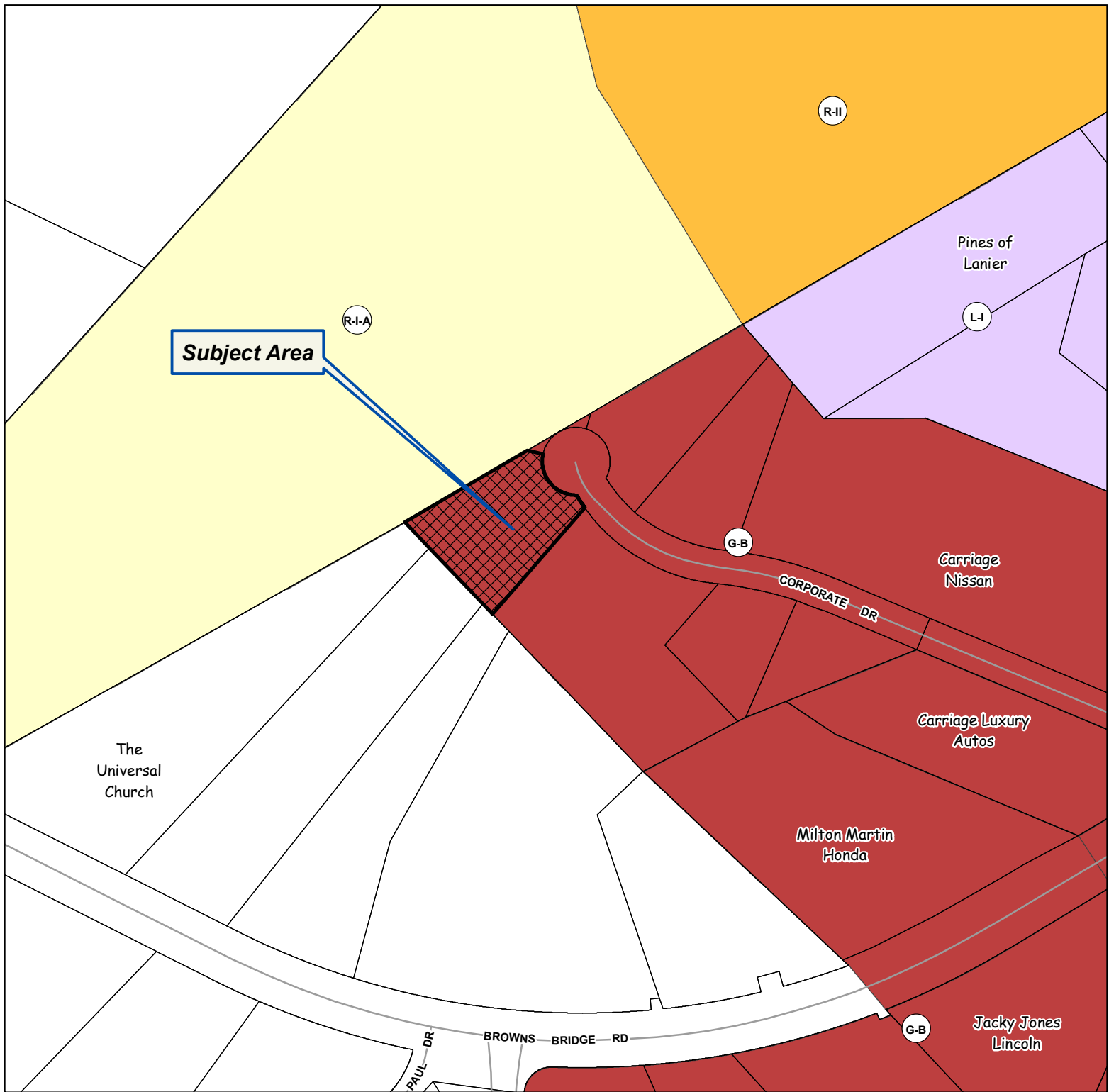
There are no buildings proposed for the use.

▪ **Staff Recommendation**

The Planning Division staff is recommending **conditional approval** of this special use request based on the adjacent and nearby commercial development and the property's distance from existing residential uses.

**Conditions**

1. The Special Use Permit contained in this application shall be valid for no more than a two year period at which time the Special Use Permit must be reapplied for and approved by the Governing Body to continue the use.
2. The applicant shall provide to the City of Gainesville Community Development Department proof of annual liability insurance coverage on the operation and use of the proposed helipad. Such coverage shall be obtained from an insurer authorized or licensed to transact insurance business in Georgia and shall provide a minimum liability coverage of at least \$500,000 per claim. The proof of liability shall be provided January 1<sup>st</sup> of every year.
3. The applicant shall provide to the City of Gainesville documentation that the proposed helipad meets Federal Aviation Administration requirements.
4. The use of the proposed helipad shall be limited to the hours of 9:00 A.M. to 6:00 P.M.
5. The proposed helipad shall be fully enclosed to include a minimum 3-foot tall safety barrier fence with a locking gate.
6. The flight pattern of any helicopter using the proposed helipad shall avoid crossing over the airspace directly above the nearby "Pines of Lanier" apartment complex or any future adjacent residential use.



Applicant:

**CARRIAGE NORTH, LLC**

## SPECIAL USE REQUEST



### Request:

Special Use within the General Business (G-B) zoning district (0.71+/- acre tract), for a helipad

### Subject Area Address:

2425 Corporate Drive

Meeting: 5/9/2017

Prepared: 4/20/2017

**Gainesville Community Development Department**

 Subject Area

0 120 240 360 480 Feet



1" = 200'

**Tax Parcel: 08-007-001-042**





Applicant:

**CARRIAGE NORTH, LLC**

## SPECIAL USE REQUEST



### Request:

Special Use within the General Business (G-B) zoning district (0.71+/- acre tract), for a helipad

### Subject Area Address:

2425 Corporate Drive

Meeting: 5/9/2017

Prepared: 4/20/2017

**Gainesville Community Development Department**



Subject Area

Aerial from 2015

0 120 240 360 480 Feet



1" = 200'

**Tax Parcel: 08-007-001-042**

Page 1114 of 1120



**NARRATIVE REPORT IN SUPPORT OF APPLICATION FOR SPECIAL  
USE PERMIT FOR HELISTOP**

Carriage North, LLC proposes to use a secured parking lot which it owns, located at 2425 Corporate Drive, Gainesville, Georgia 30504 ("the Property"), as a helicopter take-off and landing area for a single helicopter that will transport the principal of Carriage North, David Basha. Mr. Basha wishes to use the Property for efficient personal transportation via helicopter between multiple business properties which he and his affiliated companies operate.

A survey plat showing the boundaries of the Property is enclosed herewith. A separate copy of that survey is also enclosed with markings showing the proposed takeoff and landing area. This marked-up copy of the survey is submitted as this applicant's concept plan.

The helicopter to be used by Mr. Basha is a 2013 Robinson R44 helicopter (the "Helicopter"), which will be piloted by Ron Carroll of Blue Ridge Helicopters, Inc. Blue Ridge Helicopters, Inc. has insured the Helicopter against liability with limits of \$5,000,000. A copy of the Certificate of Insurance providing said coverage is enclosed herewith. It is not expected that any other aircraft will use the Property for takeoff or landing purposes.

At present, the Property is used as overflow parking for the Carriage Nissan automobile dealership located at 2400 Browns Bridge Road, Gainesville, GA 30504. The parking lot is seldom full, and sufficient free space is generally available for a helicopter landing. The Property is securely fenced with chain link fencing which has a lock to secure the area against unauthorized access.

It is expected that the Property will be used for less than ten helicopter takeoffs and landings each month. All takeoffs and landings are expected to occur during or in close proximity to normal business hours, between 9:00AM and 6:00PM.

An aerial photograph of the Property with arrows marking the proposed flight paths of the helicopter during takeoffs and landings directions is enclosed. The flight paths are over wooded areas near the Property and avoid developed or populated areas,

Applicant believes that the Property is not within 600 feet of any property zoned as residential real estate, as indicated in City Ordinance 9-10-10-1. There is an apartment complex, known as Pines of Lanier, which is located near the Property. Applicant has been informed that the apartment complex is not zoned as residential real estate. Out of respect for the residents of said apartment complex, the proposed flight paths avoid crossing over the airspace directly above or adjacent to the apartment complex. The significant wooded area between the Property and the apartment complex is expected to dampen any noise resulting from the proposed use of the Property.

This application does not propose any new construction or physical alteration of existing improvements on the Property. This application is solely for the purpose of obtaining a permit to use the existing parking lot as a helicopter takeoff and landing area. It is expected that any environmental impact will be negligible, because this application does not propose any physical alteration to the Property. As such, this application is submitted without an environmental impact report.

# CONCEPT PLAN

## SURVEYOR'S NOTES:

1. THIS PROPERTY IS NOT LOCATED WITHIN A FLOOD HAZARD AREA AS PER FIRM FLOOD INSURANCE RATE MAP CITY OF GAINESVILLE, GA. COMMUNITY PANEL NO. 130253 D188 F, EFFECTIVE DATE: 09/25/2006. THIS OPINION IS NOT A CERTIFICATION OF FLOOD HAZARD STATUS, BUT IS AN INTERPRETATION OF THE REFERENCED MAP AND PUBLIC DATA. IF THE EXACT LOCATION OR ELEVATIONS OF THE FLOOD HAZARD BOUNDARIES ARE NECESSARY, A MORE DETAILED STUDY MAY BE NEEDED. THIS FIRM ASSUMES NO RESPONSIBILITY OR LIABILITY FOR THE ACCURACY OF THE REFERENCED MAP OR PUBLIC DATA.
2. THIS SURVEY WAS PREPARED ON THE GEORGIA STATE PLANE COORDINATE SYSTEM, TRANSVERSE MERCATOR PROJECTION, WEST ZONE, NORTH AMERICAN DATUM OF 1983/2007 ADJUSTMENT. THE COMBINED SCALE FACTOR FOR THIS SITE IS: 0.99999957. (GRID DISTANCE/SCALE FACTOR=GROUND DISTANCE). ALL COORDINATES SHOWN HEREON ARE GRID COORDINATES UNLESS OTHERWISE STATED.
3. CONVENTIONAL EQUIPMENT USED FOR MEASUREMENT WAS EITHER A TOPCON C.I.S. 925A OR TOPCON PS 103. GPS EQUIPMENT USED FOR MEASUREMENT WAS A CHAMPION TWO GNSS RECEIVER USING REALTIME KINEMATIC OBSERVATIONS PROCESSED THROUGH THE CGPS NETWORK.
4. THE FIELD DATA UPON WHICH THIS PLAN IS BASED HAS A CLOSURE PRECISION OF ONE FOOT IN 45,741 FEET AND AN ANGULAR CLOSURE OF 00' 00" PER ANGLE POINT, AND WAS ADJUSTED USING LEAST SQUARES RULE. FIELD PARTY J.J. & H.R.
5. THIS PLAN HAS BEEN CALCULATED FOR CLOSURE AND WAS FOUND TO BE ACCURATE WITHIN ONE FOOT IN +27,069 FEET.
6. THE SURVEY WAS PREPARED WITHOUT THE BENEFIT OF TITLE REVIEW AND IS SUBJECT TO ANY RESERVATIONS, RESTRICTIONS, RIGHTS-OF-WAY AND EASEMENTS OF RECORD.
7. THIS PLAN OF SURVEY IS FOR THE EXCLUSIVE USE OF THE PARTIES LISTED UNDER THE CAPTION "SURVEY FOR" ANY THIRD PARTY USE TO BE AT THEIR OWN RISK.
8. THE FIELD SURVEY WAS CONDUCTED ON 12/04/2014.

## REFERENCES:

1. DEED BOOK 3473, PAGES 403-404
2. PLAT BOOK 120, PAGES 254-255

## STATE WATERS BUFFER:

AN UNDISTURBED VEGETATIVE BUFFER MEETING CITY AND STATE REGULATIONS WILL BE PRESERVED ADJACENT TO ALL STREAMS AND LAKES. BUFFER IS TO BE MEASURED HORIZONTALLY FROM POINT WHERE VEGETATION HAS BEEN WRESTED BY NORMAL STREAM FLOW OR WAVE ACTION.

LOT 4 = AREA: 0.70 ACRES  
 LOT 5 = AREA: 0.71 ACRES  
 AREA 1 = 0.007 ACRES (318.93 SQ. FT.)  
 AREA 2 = 0.007 ACRES (319.20 SQ. FT.)

Red circle shows  
 approximate proposed  
 landing and take-off  
 zone for helicopter

## SURVEYOR'S CERTIFICATE

It is hereby certified that this plan is true and correct and was prepared from an actual survey of the property by me or under my supervision; that all monuments shown thereon actually exist. The field data upon which this plan is based has a closure precision of one foot in 45,741 feet, and an angular error of 00'00" per angle point, and was adjusted using Crandall rule. This plan has been calculated for closure and is found to be accurate within one foot in 45,741 feet.

*Chris M. Patton*

By: CHRIS M. PATTON  
 Registered Georgia Land Surveyor No. 2647  
 Patton Land Surveying  
 P.O. Box 256  
 Gainesville, GA 30503  
 Phone: (770) 532-6492  
 Fax: (770) 532-1895  
 E-Mail: cpatt@pattonlandsurveying.com  
 Date: DECEMBER 5, 2014

## OWNER'S CERTIFICATE

State of Georgia  
 City of Gainesville, County of Hall

The undersigned certifies that he or she is the owner and subdivider of the land shown on this plan and that the plan and the public and private improvements contained therein or associated therewith meet all applicable requirements and standards of the Gainesville Unified Land Development Code. The owner further acknowledges this plan and its effect to be his free act and deed, and dedicates to the Public forever all areas shown or indicated on this plan as public streets, easements or other public use areas, and all water system, sewerage and other public improvements (hereinafter "facilities"). However, the City of Gainesville will not take ownership and maintenance of these facilities until such time as the undersigned petitions for and the Governing Body of the City of Gainesville accepts the dedication and acceptance of the facilities as provided in section 9-13-14-12 of the Gainesville Unified Land Development Code and provides a maintenance bond as required in sections 9-13-15-9 and 10.

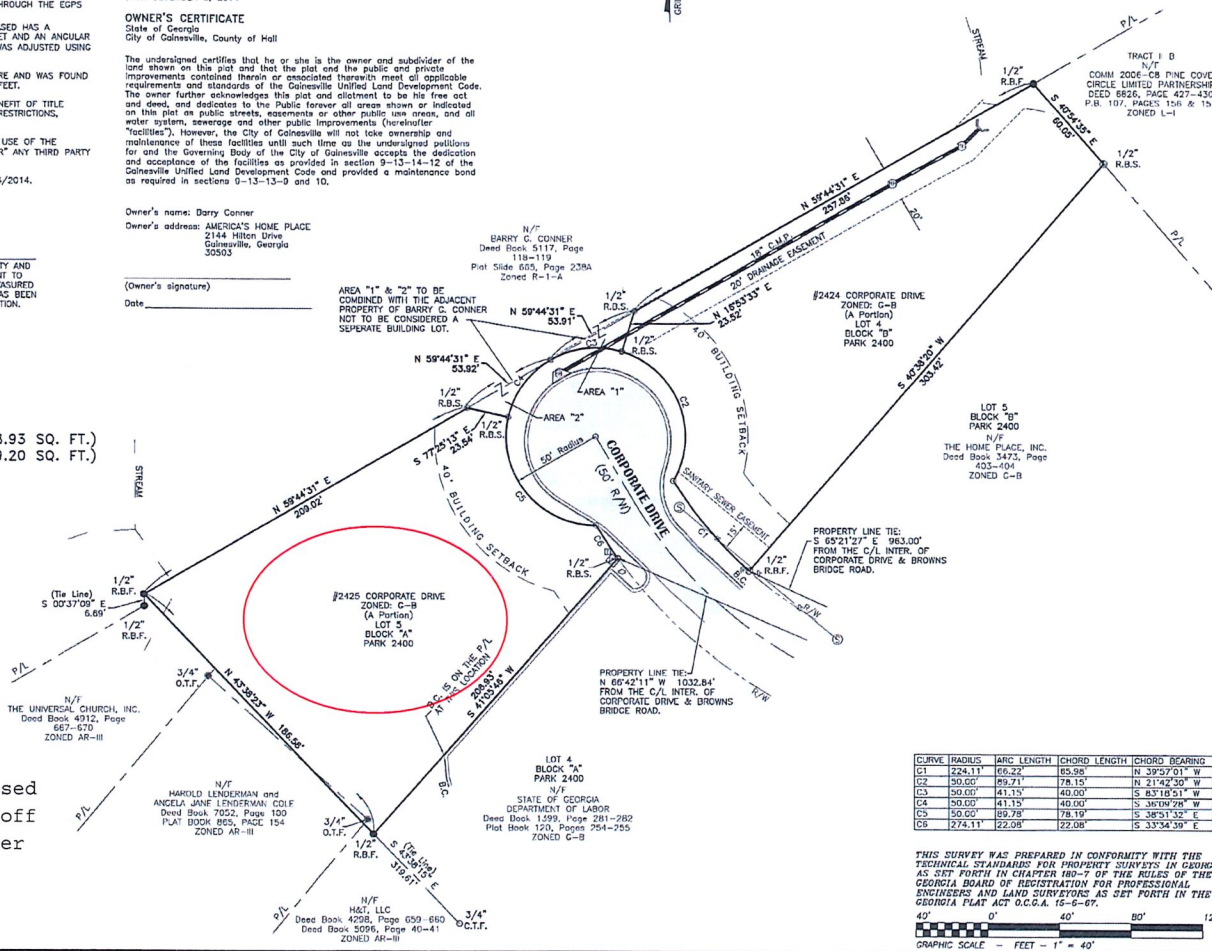
Owner's name: Darryl Conner  
 Owner's address: AMERICA'S HOME PLACE  
 2144 Hitten Drive  
 Gainesville, Georgia  
 30503

(Owner's signature)

Date:

## LEGEND:

- C.M.F. - CONCRETE MONUMENT FOUND
- C.T.F. - CRIMP TOP PIN FOUND
- R.B.F. - REBAR FOUND (SEE DRAWING FOR SIZE)
- O.T.F. - OPEN TOP FOUND (SEE DRAWING FOR SIZE)
- I.P.F. - IRON PIN FOUND
- J.B. - JUNCTION BOX
- C.P. - CALCULATED POINT
- C.R. - CABLE RISER
- T.R. - TELEPHONE RISER
- P.B. - POWER TRANSFORMER BOX
- W.M. - WATER METER
- W.V. - WATER VALVE
- F.H. - FIRE HYDRANT
- S.C.M.H. - SANITARY CENTER MANHOLE
- C.V. - SANITARY GATE VALVE
- E.P. - EDGE OF PAVEMENT
- B.C. - BACK OF CURB
- C.M.P. - CORRUGATED METAL PIPE
- D.S.L. - DURED SEWER LINE
- P/L - PROPERTY LINE
- R/W - RIGHT-OF-WAY
- N/F - NOW OR FORMERLY
- C.L. - CENTERLINE
- S/B - SETBACK
- C.O. - CONTINUOUS OWNERSHIP



| CURVE | RADIUS  | ARC LENGTH | CHORD LENGTH | CHORD BEARING |
|-------|---------|------------|--------------|---------------|
| C1    | 224.11' | 89.22'     | 65.98'       | N 39°27'01\"  |
| C2    | 50.00'  | 89.71'     | 78.15'       | N 21°42'50\"  |
| C3    | 50.00'  | 41.15'     | 40.00'       | S 83°16'51\"  |
| C4    | 50.00'  | 41.15'     | 40.00'       | S 38°57'28\"  |
| C5    | 50.00'  | 89.78'     | 78.19'       | S 38°51'52\"  |
| C6    | 274.11' | 22.09'     | 22.08'       | S 33°54'39\"  |

THIS SURVEY WAS PREPARED IN CONFORMITY WITH THE TECHNICAL STANDARDS FOR PROPERTY SURVEYS IN GEORGIA AS SET FORTH IN CHAPTER 180-7 OF THE RULES OF THE GEORGIA BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS AS SET FORTH IN THE GEORGIA PLAT ACT O.C.G.A. 16-6-67.

GRAPHIC SCALE - FEET - 1" = 40'

REGISTERED PROFESSIONAL LAND SURVEYORS  
 P.O. BOX 256  
 GAINESVILLE, GA 30503  
 PHONE: (770) 532-6492  
 FAX: (770) 532-1895  
 www.pattonlandsurveying.com  
 SURVEYED BY: J.J. & H.R.  
 COMPUTATIONS BY: C.M.P.  
 CHECKED BY: R.C.H.

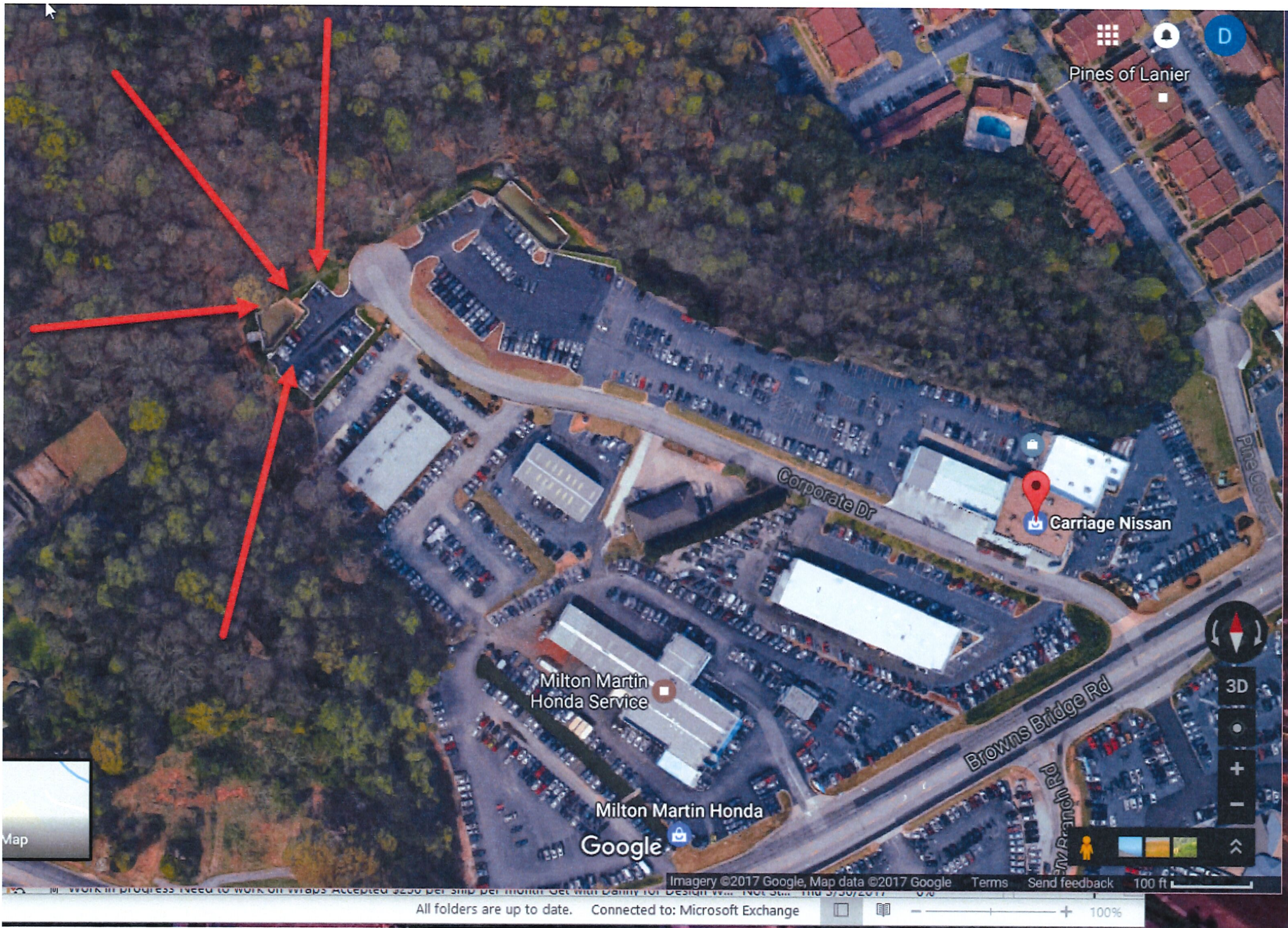
GEORGIA REGISTERED PROFESSIONAL SURVEYOR  
 No. 2647  
 Chris M. Patton

RETRACEMENT / SUBDIVISION SURVEY FOR:  
 THE HOME PLACE, INC.  
 BEING LOT 4 - BLOCK "B" AND LOT 5 BLOCK "A" PARK 2400 LOCATED IN  
 LAND LOT 7  
 8TH LAND DISTRICT  
 CITY OF GAINESVILLE  
 HALL COUNTY, GEORGIA

REVISIONS:  
 DATE:

SHEET NUMBER:  
 1 of 1  
 SCALE: 1" = 40'  
 SURVEY DATE: 12/04/2014  
 PLAT DATE: 12/05/2014  
 16-1118-A  
 JN. 14-111







# ACORD® CERTIFICATE OF AIRCRAFT INSURANCE

DATE (MM/DD/YYYY)

02/10/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER  
Southwest Aviation Ins Group of AZ Inc.  
14415 N. 73rd Street, Ste 115  
Scottsdale, AZ, 85260

CONTACT  
NAME:

PHONE  
(A/C, No, Ext):

FAX  
(A/C, No):

E-MAIL ADDRESS:

PRODUCER CUSTOMER ID No.

INSURED  
Blue Ridge Helicopters, Inc.

c/o Ron Carroll, 850 Airport Rd.  
Lawrenceville, GA, 30046

INSURER(S) AFFORDING COVERAGE

%

NAIC No.

INSURER A: U.S. SPECIALTY INSURANCE COMPANY

100%

INSURER B:

INSURER C:

INSURER D:

INSURER E:

INSURER F:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

## POLICY INFORMATION

## CERTIFICATE NUMBER:

## REVISION NUMBER:

| POLICY TYPE                             |                                         |                                                |                                         | LINE OF BUSINESS SUBCODE                             |                                      |                                 |                                      |
|-----------------------------------------|-----------------------------------------|------------------------------------------------|-----------------------------------------|------------------------------------------------------|--------------------------------------|---------------------------------|--------------------------------------|
| <input type="checkbox"/> INDUSTRIAL AID | <input type="checkbox"/> PLEASURE & BUS | <input checked="" type="checkbox"/> COMMERCIAL | <input type="checkbox"/> AIRPLANE       | <input checked="" type="checkbox"/> HELICOPTER       | <input type="checkbox"/> MIXED FLEET | <input type="checkbox"/> EXCESS | <input type="checkbox"/> QUOTA SHARE |
| <input type="checkbox"/> NON-OWNED      |                                         |                                                | <input type="checkbox"/> LIABILITY ONLY | <input checked="" type="checkbox"/> HULL & LIABILITY | <input type="checkbox"/> HULL ONLY   |                                 |                                      |

## AIRCRAFT INFORMATION

ACORD 333, Aircraft Schedule attached

|              |                  |              |               |                               |
|--------------|------------------|--------------|---------------|-------------------------------|
| YEAR<br>2013 | MAKE<br>ROBINSON | MODEL<br>R44 | SERIAL NUMBER | REGISTRATION NUMBER<br>N1958C |
| TERRITORY:   |                  |              |               |                               |

## AIRCRAFT COVERAGES

| INSURER LETTER     | POLICY NUMBER                                                  | EFFECTIVE DATE | EXPIRATION DATE | ADDITIONAL INSURED? (Y/N) | SUBROGATION WAIVED? (Y/N) |
|--------------------|----------------------------------------------------------------|----------------|-----------------|---------------------------|---------------------------|
|                    | AC3001524-02                                                   | 10/28/2016     | 10/28/2017      | Y                         | N                         |
| COVERAGE           | OPTIONS                                                        | LIMIT          | APPLIES TO      | LIMIT                     | APPLIES TO                |
| AIRCRAFT HULL      | <input checked="" type="checkbox"/> ALL RISK GROUND AND FLIGHT | \$ 400,000     | AGREED VALUE    | \$ 1,000                  | Ded. - Not in motion      |
|                    | <input type="checkbox"/> ALL RISK GROUND ONLY                  |                |                 | \$ 20,000                 |                           |
| AIRCRAFT LIABILITY | <input checked="" type="checkbox"/> LIABILITY                  | \$ 5,000,000   | EA OCC          | \$                        | EA PER                    |
|                    |                                                                | \$ 100,000     | EA PASS         | \$                        | AGGR                      |
| MEDICAL PAYMENTS   | <input checked="" type="checkbox"/> INCLUDING CREW             | \$ 5,000       | EA PER          | \$ 20,000                 | EA OCC                    |
|                    | <input type="checkbox"/> EXCLUDING CREW                        |                |                 |                           |                           |
| COVERAGE           | OPTIONS                                                        | LIMIT          | APPLIES TO      | LIMIT                     | APPLIES TO                |
| CODE               | DESCRIPTION                                                    |                |                 |                           |                           |

## DESCRIPTION OF OPERATIONS / REMARKS (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Certificate Holder is included as an Additional Insured.

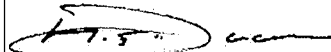
## CERTIFICATE HOLDER

## CANCELLATION

Galleria Common Area Associates, LLC; Childress Klein Properties, Inc.; CK Galleria Associates, LLC; Piedmont 200 Galleria Owner, LLC; Piedmont 300 Galleria, LLC; CK Galleria 300 Associates, LLC; OTR; Galleria 400, LLC; Galleria 600, LLC; CK Galleria 600 Associates, LLC; Galleria Management Services Limited Partnership; Galleria Management Services, Inc.; Galleria Management, LLC; Galleria Retention Area Associates, Inc.; Institute of Nuclear Power Operations, Inc. and each of their affiliates, shareholders, directors, officers, employees, agents and representatives.  
300 Galleria Parkway SE Ste. 200, Atlanta, GA 30339

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE



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ACORD 21 (2009/12)

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